

BLUE WATER BRIDGE PLAZA STUDY FINAL ENVIRONMENTAL IMPACT STATEMENT

MARCH 20, 2009
FINAL



BLUE WATER BRIDGE PLAZA STUDY

ST. CLAIR COUNTY MICHIGAN

PREPARED BY: MICHIGAN DEPARTMENT OF TRANSPORTATION



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Blue Water Bridge Plaza Study
St. Clair County, Michigan

**Final Environmental Impact Statement
and Section 4(f) Evaluation**

Submitted Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

By the

U.S. Department of Transportation
Federal Highway Administration

and

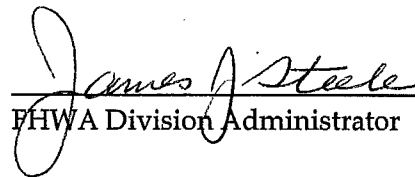
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Cooperating Agencies

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U.S. General Services Administration
U.S. Army Corps of Engineers
U.S. Coast Guard

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Date of Approval


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This Final Environmental Impact Statement (FEIS) documents the social, economic, and environmental consequences and mitigation measures for improving the United States Inspection Plaza at the Blue Water Bridge located in St. Clair County, Michigan. This project is commonly referred to as the Blue Water Bridge Plaza Study. The No-Build and Recommended

Alternative are evaluated in this document. This FEIS presents the Recommended Alternative for the Study Area that includes expanding the existing plaza in its current location and improvements to the I-94/I-69 corridor. The Recommended Alternative was evaluated in detail and will accommodate projected year 2030 plaza traffic growth; provide space for future plaza facility additions and new inspection technologies; reduce traffic backups on I-94/I-69, the Blue Water Bridge, and Highway 402 in Canada; improve safety on the Blue Water Bridge; and minimize impacts of plaza traffic on local roads. Important issues and concerns related to the effects of the Recommended Alternative on the natural, human, and built environment include neighborhood and community cohesion, visual character, noise, air quality, and land use patterns. This FEIS fulfills the requirements of the National Environmental Policy Act (NEPA) guidelines, and requirements of the Council on Environmental Quality, and the Federal Highway Administration.

PREFACE

This Final Environmental Impact Statement (FEIS) has been prepared in compliance with the National Environmental Policy Act (NEPA) federal regulations on procedures for preparing environmental documents, Section 4(f) of the U.S. Department of Transportation (DOT) Act, and Michigan and federal environmental laws and regulations.

NEPA, enacted in 1969, requires that an Environmental Impact Statement (EIS) be prepared for all major actions significantly affecting the quality of the human environment. The EIS must address the environmental effects of alternatives for the proposed federal action it describes. Such actions include federal projects, state and local programs funded by federal assistance, and private development authorized by federal permits.

Part 771 of 23 Code of Federal Regulations (Highways) states that alternative courses of action must be evaluated and decisions should be made in the best overall public interest. The decisions should be based upon a balanced consideration of the need for safe and efficient transportation, social, economic, and environmental impacts of the proposed transportation improvement, and national, state, and local environmental protection goals. In addition, the alternatives should connect logical termini and be of sufficient length to address environmental matters on a broad scope. Technical Advisory T 6640.8A of the Federal Highway Administration (FHWA) states that all reasonable alternatives under consideration must be developed to a comparable level of detail so that their comparative merits may be evaluated. The Blue Water Bridge Plaza Study FEIS complies with these requirements.

In addition, in keeping with FHWA regulations and guidelines, an extensive public involvement program was developed and implemented for this project. Early coordination and scoping activities have informed the public and appropriate agencies about the proposed Blue Water Bridge Plaza Study. The public involvement program continues and affords the public and agencies opportunities for further review and comment.

A federal agency may publish a notice in the Federal Register, pursuant to 23 USC §139(l), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 180 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

NOTICE TO READER

The Final EIS was prepared as a Condensed Final EIS. This approach avoids repetition of material from the Draft EIS by incorporating, by reference, the Draft EIS. This approach briefly references and summarizes information from the Draft EIS, that has not changed, and focuses the Final EIS discussion on changes in the project's setting, impacts, technical analysis, and mitigation measures that have occurred since the Draft EIS was circulated. Additionally, the condensed Final EIS identifies the Recommended Alternative, explains the basis for its selection, describes coordination efforts, includes agency and public comments, provides responses to these comments, and presents any findings or determinations required by laws or regulation.

This format provides the reader with a much shorter document than under the traditional approach; while still providing the reader a complete overview of the project and its impacts on the human environment. The Condensed Final EIS is supported by The Federal Council on Environmental Quality (CEQ) Regulations for implementing the National Environmental Policy Act (40 CFR 1500-1508) which places heavy emphasis on reducing paperwork, avoiding unnecessary work, and producing documents that are useful to decision-makers and the public.

An additional copy of the Draft EIS is not being provided to those parties that received a copy of the Draft EIS when it was circulated in August 2007. Copies of the Draft EIS are available for review at facilities listed in this document or by special request to MDOT's Public Hearing Officer, Mr. Bob Parsons at (517) 373-9534.

FORMAT OF THIS FINAL ENVIRONMENTAL IMPACT STATEMENT

Reader Friendly Format

The Blue Water Bridge Plaza Study Final Environmental Impact Statement (FEIS) was created in a reader friendly format. This format differs significantly from the traditional EIS format and is based partly on the Reader-Friendly Document Tool Kit published by Washington State Department of Transportation.

The reader friendly format attempts to meet the needs of professionals, decision makers and the public by engaging the reader through the use of question and answer headings, defined terms, and visuals in an easy to follow format. This format saves time and effort by reducing confusion and allowing the reader to focus on the project and its key issues. Text and graphics are placed on the same page to make the document interesting and understandable to readers. Additional technical information is available in the various technical memoranda prepared for the project. Following the National Environmental Policy Act guidelines, this document is concise, clear and to the point. It thoroughly summarizes the Blue Water Bridge Plaza Study and references supporting technical details. The example below compares traditional EIS headings and reader friendly EIS headings.

Traditional EIS	Reader-Friendly EIS
Purpose and Need	Why are Improvements Needed?
Affected Environment	The Environment: What's There Now and Project Effects
Existing Regional Land Cover	What Are the Land Uses in the Study Area?
Land Use Impacts	How will the Alternatives Affect Land Use?
Water Body Modification and Wildlife Impacts	How many acres of Wetlands will the Recommended Alternative Impact?

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EXECUTIVE SUMMARY

This Final Environmental Impact Statement (FEIS) discusses the Recommended Alternative for improving the United States Inspection Facility at the Blue Water Bridge Plaza and the I-94/I-69 corridor in St. Clair County, Michigan. This project is commonly referred to as the Blue Water Bridge Plaza Study.

The Final EIS was prepared as a Condensed Final EIS. This approach avoids repetition of material from the Draft Environmental Impact Statement (DEIS) by incorporating, by reference, the DEIS resulting in a much shorter document than under the traditional FEIS approach. This document still provides the reader with a complete overview of the project and its impacts on the human and natural environments. This FEIS focuses on changes in the project's setting, impacts, technical analysis, and mitigation measures that have occurred since the DEIS was circulated.

What is the United States Plaza at the Blue Water Bridge?

The United States Plaza, which is owned by the Michigan Department of Transportation (MDOT), is the inspection facility for vehicles entering the United States. The Blue Water Bridge is a major border crossing for cars and trucks between the United States and Canada. The Blue Water Bridge consists of two bridge spans over the St. Clair River, one for traffic to Canada and one for traffic to the United States. The bridges are jointly owned by MDOT and Blue Water Bridge Canada (BWBC). Federal agencies operating on the plaza include the Bureau of Customs and Border Protection (CBP), the United States Department of Agriculture (USDA), and the United States Food and Drug Administration (FDA). These agencies are responsible for inspecting vehicles, goods, and people entering the United States. The inspection agencies rent facilities on the United States Plaza from MDOT through the General Services Administration (GSA), which provides buildings for the federal government.



**Existing United States Blue
Water Bridge Plaza**

MDOT collects tolls on the plaza from vehicles leaving the United States for Canada and the Michigan State Police operate a truck weigh scale on the plaza.

The existing Blue Water Bridge Plaza is approximately 18 acres including inspection facilities and parking. The existing plaza is elevated approximately 24 feet above street level to accommodate Pine Grove Avenue, which runs underneath.



Location of Blue Water Bridge Plaza

Where is the Blue Water Bridge Plaza Located?

The Blue Water Bridge Plaza Study Area is located in the city of Port Huron and Port Huron Township, in St. Clair County, Michigan. The Study Area begins at the western end of the Blue Water Bridge and ends at the I-94/I-69 interchange approximately 2.2 miles to the west. The Blue Water Bridge provides access to destinations across Michigan, 47 other states, Mexico, and Canada.

The Study Area includes the Black River Bridge, the Water Street/Lapeer connector interchange, the existing plaza area, and a potential location for a relocated welcome center and a plaza alternative in Port Huron Township.



Existing United States Plaza Looking West

What Improvements are Needed on the United States Plaza?

The Purpose of the Blue Water Bridge Plaza for the foreseeable future is to:

- Provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Port Huron area to support the economies of Michigan, Ontario, Canada, and the United States
- Support the mobility and security needs associated with national and civil defense.

A detailed list of reasons for improvements to the Blue Water Bridge plaza is located in **Section 1.5.1** in this **FEIS**.

The selected alternative must provide additional space for inspection booths, offices, docks to inspect and unload cargo, new security measures, and parking for cars and trucks

needing inspection. The need for additional space and facilities is supported by several key issues including:

- Security issues
- The introduction of new inspection technologies, procedures, and policies
- Limited existing space to accommodate increased number of border inspection agents
- Traffic conflicts and crash history
- Access between the plaza and adjacent circulatory local roads
- Traffic growth
- Traffic backups
- Existing infrastructure conditions of the I-94/I-69 corridor
- Upgrading the Michigan Welcome Center

Further details on the reasons for improvements are contained in **Chapter 1 Why Are Improvements Needed?** of this FEIS.

The proposed plaza expansion was designed in accordance with the United States Land Port of Entry Design Guide and CBP's Program of Requirements (POR). A POR, which is developed by CBP, outlines detailed infrastructure improvements specific to a given port of entry. The POR used to design the Blue Water Bridge Plaza Preferred Alternative referenced in the DEIS has since been modified by CBP resulting in additional justifications supporting the need of the project. Changes to border operational policies and CBP plaza design principles have required changes to the Blue Water Bridge Plaza layout.

The following provides a summary of changes to the Recommended Alternative based on the most recent POR:

Canada to U.S. Primary Inspection: The overall Primary Inspection Lanes (PIL) layout was modified between the DEIS and this FEIS to include five lanes specifically designated for passenger traffic and 15 lanes that can be utilized for either trucks or cars. These 15 dual-use lanes can accommodate either inspection by CBP officers, depending upon the mix and demand of incoming U.S. border traffic.

Main Administration Building: The relocation of CBP's main administration building in relation to the primary inspection booths has been modified. Within the DEIS, the PILs were separated by CBP's main administration building. The current POR states that a single line of PILs is desirable to allow a clear line of sight from the administration building and the head house to all of CBP's Primary Inspection Booths.

A proposed 100,000 sq. ft. office building identified within the DEIS is no longer required. CBP's primary administration space on the plaza has been reduced from a DEIS layout of 65,250 sq. ft. to a proposed FEIS layout of 20,307 sq. ft. This reduction of space in CBP's main administration building results from a revised analysis of future staffing needs and facility requirements, and addresses comments received on the DEIS.

Federal Agency Employee and Visitor Parking: Staff parking spaces on this FEIS plaza layout have been reduced from 582 spaces identified in the DEIS to 168 spaces. This reduction in parking is due to a combination of the reduction of onsite office and facility needs, refinements made to the plaza configuration and CBP's efforts to minimize the impacts of the plaza on the greater Port Huron community.

Passenger Secondary Inspection: A head house is proposed on the new plaza for passenger secondary inspection. The DEIS did not call for a head house as the non-commercial secondary inspection was located directly in front of the main building. This FEIS POR requires the head house and passenger secondary inspection to be located independent of the main administration building and directly in front of the Primary Inspection Booths. The head house functions as administrative and processing support for the passenger secondary vehicle inspection area and operates as an observation area for the primary inspection booths.

Commercial Secondary Inspection: Trucks sent to the secondary inspection area may be directed to a set of secondary radiation monitoring portals or they will be sent for Non-Intrusive Inspection (NII). Space for the secondary radiation detection portals is a new requirement for this FEIS plaza layout. The number of secondary loading docks increased from 12 docks

to 20 docks and the number of truck parking spaces decreased from 100 spaces within the DEIS to 36 spaces in this FEIS. The additional unloading docks also reduce the need for parking spaces.

The number of NIIs increased from three permanent to four (two permanent and two mobile NIIs) reflecting CBP's desire to increase the number of trucks that ultimately will be required to be inspected using NII technology.

Exit Control: The DEIS called for exit control from Commercial Secondary Inspection only with no exit control for vehicles exiting primary inspection. An exit control option was added to this FEIS plaza layout.

Outbound U.S. Traffic to Canada: The DEIS called for outbound inspection facilities that resembled a small port that occupied approximately 8 acres of land. The revised POR called for a much smaller facility that would operate on a more random basis and utilize some of the inbound facilities such as NII. Outbound inspection facilities were modified in this FEIS POR with four PILS compared to three PILS, a 1,239 sq. ft. building compared to a 6,000 sq. ft. building and a reduction of docks from five docks to two docks.

A full description of the POR can be found in **Section 1.6.1** in this FEIS.

What Alternatives were Considered for Improving the Plaza?

The alternatives development process included several steps. First, the Study Team developed initial concepts for a new plaza. These initial concepts were further developed into 19 Illustrative Alternatives Concepts. Based on engineering analysis and coordination with stakeholders, the Illustrative Alternatives Concepts were refined into six Illustrative Alternatives that were presented to the public.

The Study Team then evaluated and modified the Illustrative Alternatives based on public and agency comments. Two of the Illustrative Alternatives were eliminated as they did not adequately address the purpose and need for improvements

The No-Build Alternative has always been an option in case the benefits of improvements to the plaza do not outweigh the social, economic and environmental impacts.

to the plaza. The remaining Updated Alternatives were presented for further public and agency comments including review by CBP and were presented at an additional public meeting.

Based on further analysis, local stakeholder and public comment, the Study Team reduced the list of alternatives down to three Build Alternatives, referred to as the City East Alternative, the City West (Preferred) Alternative, and the Township Alternative, along with the No-Build Alternative. A full discussion of all Illustrative and Practical Alternatives and the reasons why they have been eliminated from further consideration can be found in **Chapter 2** of the **DEIS**.

The two alternatives presented in this FEIS are:

- The No-Build Alternative, which involves no expansion of the existing plaza or the I-94/I-69 corridor, and
- The Recommended Alternative, which incorporates design modifications from the DEIS City West (Preferred) Alternative.



Current Blue Water Bridge Plaza

This FEIS discusses the No-Build Alternative as a basis of comparison. This FEIS presents changes to the Recommended Alternative incorporating design modifications from the DEIS City West (Preferred) Alternative.

No-Build Alternative: The No-Build Alternative would not make any changes to the existing plaza configuration or ramps. MDOT and CBP would continue to maintain the existing plaza facilities and new technologies and procedures would be introduced on the existing plaza footprint as space allows. The existing welcome center will remain in its current location.

Key Reasons Why the Refined Preferred Alternative is the Recommended Alternative

The Recommended Alternative best addresses the reasons for plaza improvements and has specific advantages over the other alternatives with regards to security and community impacts.

Safety & Security: The Recommended Alternative meets all safety and security requirements of an international border crossing by:

- Eliminating a major roadway (Pine Grove Avenue) running beneath the inspection area.
- Locating all major roadway crossings west of the primary and secondary inspection points on the plaza, enhancing the security of the facility and reducing the vulnerabilities of the plaza.
- Minimizing the ability of border runners to cross through the plaza without being inspected as a result of the new layout.

Accommodates CBP Technologies: The Recommended Alternative includes all of the inspection facilities required by CBP as well as space for additional facilities which future traffic conditions and new technologies may require:

- The Recommended Alternative features a facility layout that is preferred by CBP and GSA based on the Program of Requirements (POR) discussed in **Chapter 1** of this **FEIS**.
- The Recommended Alternative provides CBP with the space and flexibility to implement both current and future technologies.

Improved Flow of Traffic: The Recommended Alternative best improves current and future traffic issues on the local roads surrounding the plaza.

- The Recommended Alternative improves upon the current geometric and operational deficiencies at the Pine Grove Avenue and 10th Avenue intersection. By modifying the 10th Avenue intersection from a six-legged intersection to a four-leg the number of potential vehicle conflict points will be dramatically decreased. A vehicle conflict point is any location where a vehicle needs to cross the path of another vehicle in the intersection. For instance a left-

turning vehicle needs to cross the path of an on-coming through vehicle to complete the movement.

- The intersection of Pine Grove Avenue and M-25 connector north of the plaza is eliminated, and now located south at the relocated Pine Grove Avenue.
- The Recommended Alternative is projected to reduce future congestion at the Hancock Street and M-25 connector intersection.

Local Access Enhancements: The Recommended Alternative will provide local access enhancements both from the plaza and from the I-94/I-69 corridor.

- The Recommended Alternative will provide direct access from the plaza to local destinations north and south of the plaza.
- The Recommended Alternative provides both east and west access to the I-94/I-69 corridor at a redesigned full access Lapeer connector interchange.
- The Recommended Alternative also provides better north-south local access around the new plaza than other alternatives.

Emergency Response: Emergency access to neighborhoods surrounding the plaza will be maintained with the Recommended Alternative.

- Emergency responders will still have two choices for north south access around the plaza with the Recommended Alternative. Emergency responders can utilize either 10th Avenue or the relocated Pine Grove Avenue as a north-south alternate route if one or the other became blocked by a traffic accident or other incident. Emergency access to the plaza would be through gated access from local streets.

Gateway Effect: The Recommended Alternative would provide a superior visual entrance to the city of Port Huron and the surrounding area.

- The Pine Grove Avenue boulevard design with direct access to either northbound or southbound Pine Grove Avenue will increase both visibility and access to the city of Port Huron. Opportunities to incorporate enhanced landscaping and signage are much greater under this alternative compared to other alternatives evaluated.

The Recommended Alternative: Revisions to the City West (Preferred) Alternative were made to address the overall plaza size and layout, and reduce the social, economic and environmental impacts. These changes are presented in this FEIS as the Recommended Alternative.

Specific changes of the Recommended Alternative include:

- Overall size of permanent CBP/MDOT plaza facilities was reduced from 65 to 56 acres even though CBP guidelines suggest an 80 acre plaza as the standard.
- Reduction of the right-of-way impacts within the city of Port Huron to the greatest extent possible bringing the total relocations down to 125 residences and 30 businesses.
- CBP operating space on the plaza was reduced from 57 acres to 46 acres.
- The number of truck parking spaces on the new plaza was reduced from 100 to 36.
- 100,000 sq. ft. of office space was removed from the plaza.
- CBP's proposed outbound inspection facilities were greatly reduced.
- Customs broker's offices were removed from the proposed plaza.
- Another modification to the plaza was a more efficient design of the duty free store parking area, which provides a better vehicle flow for entering and exiting traffic.



The Blue Water Bridge

The Recommended Alternative, as illustrated in **Figure E.1.**, expands the existing plaza within the city of Port Huron and brings most of the elevated plaza down to street level. This alternative meets all plaza operational and traffic circulation needs through the year 2030.

The Recommended Alternative still requires the relocation of Pine Grove Avenue to the west between 10th Avenue and Riverview Street. Relocated Pine Grove Avenue will wrap around the south and west sides of the new plaza then split into separate northbound and southbound lanes near the

Hancock Street/M-25 connector intersection. The northbound lanes would turn back east and connect to the existing Pine Grove Avenue at approximately Riverview Street. The southbound lanes would follow the existing M-25 connector.

The Recommended Alternative provides 20 primary inspection booths for cars and trucks arriving from Canada. 15 of these booths will be able to accommodate both cars and trucks. (**Figure E.2**)

Recommended Alternative Blue Water Bridge Plaza Study



Figure E.1 Recommended Alternative in the city of Port Huron

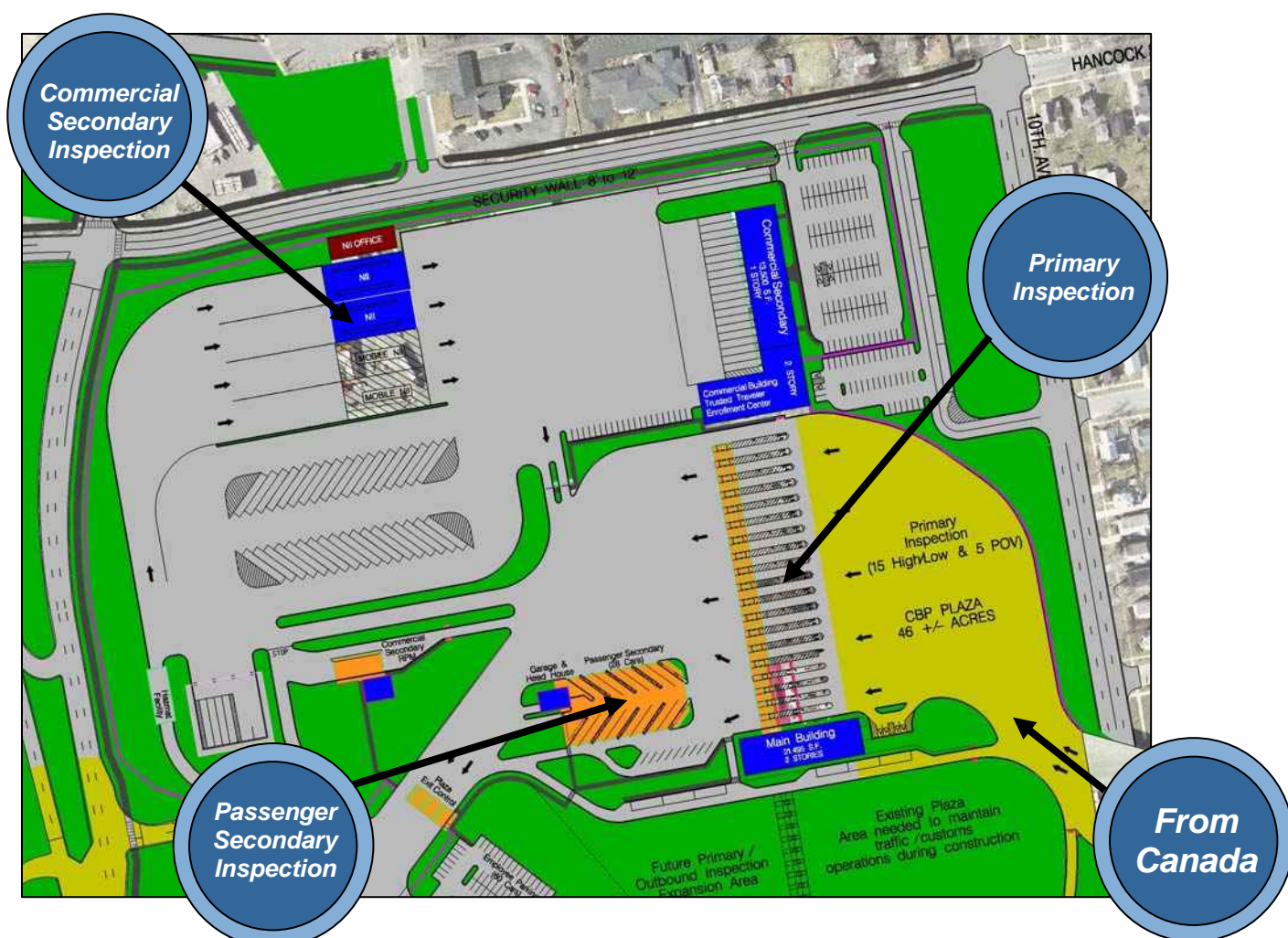


Figure E.2 Close-Up of Recommended Alternative Plaza

Trucks not cleared at the primary inspection booths are sent to the secondary truck inspection area (**Figure E.2**). The truck secondary inspection area contains 36 truck parking spaces to accommodate trucks sent to secondary inspection for document processing. Twenty docks for unloading trucks, and 35,600 square feet of office and unloading space are also included in this area.

The truck inspection area will include a special dock for livestock inspection that allows inspection officers to walk around the trailer on an elevated platform to view into a livestock trailer. No unloading of animals would occur on the plaza.

Up to four Non-Intrusive Inspection (NII) units will be utilized, which allow CBP officers to electronically scan the contents of vehicles.

Cars with passengers that are not cleared to enter the United States or require further processing are sent to the secondary inspection area (**Figure E.2**). The passenger secondary inspection area is located just downstream of the Primary Inspection Booths. The secondary inspection area for passenger vehicles includes space to inspect 28 cars and includes a head house building. The head house functions as administrative and processing support for the passenger secondary vehicle inspection area and operates as an observation area for the primary inspection booths. This building also would contain enclosed inspection garages and additional space for CBP officers to conduct border processing paperwork. There is also a parking area for cars that require further inspection.

Local and international traffic that has cleared customs has easy access to both the city of Port Huron and Fort Gratiot Township (located north of the plaza and the city of Port Huron). For visitors wishing to visit the city, a left hand turn at the signalized intersection will provide direct access to southbound Pine Grove Avenue (**Figure E.3**). For those interested in visiting Fort Gratiot and points north, a right hand turn at the signalized intersection will provide direct northern access to northern St. Clair County and the thumb region of Michigan.

Facilities will be provided to allow CBP to inspect cars and trucks leaving the United States. This area is called outbound inspection (**Figure E.4**). Eight toll lanes will precede outbound inspection facilities. Following the toll lanes, cars and trucks pass through the outbound inspection facilities which include four booths, two docks for unloading trucks and adequate truck and car parking spaces.

A new duty free store and parking would occupy approximately four acres and could only be accessed by drivers who have already cleared outbound inspection and the toll booths. Following the duty free store, all vehicles would take the bridge to Canada.

What is Outbound Inspection?

Outbound inspection booths and facilities allow CBP to enforce export control legislation and inspect certain individuals leaving the country. Currently, CBP conducts random exit control interviews by flagging down outbound vehicles after they pass through the toll booths.



Figure E.3 Primary Inspection Exit

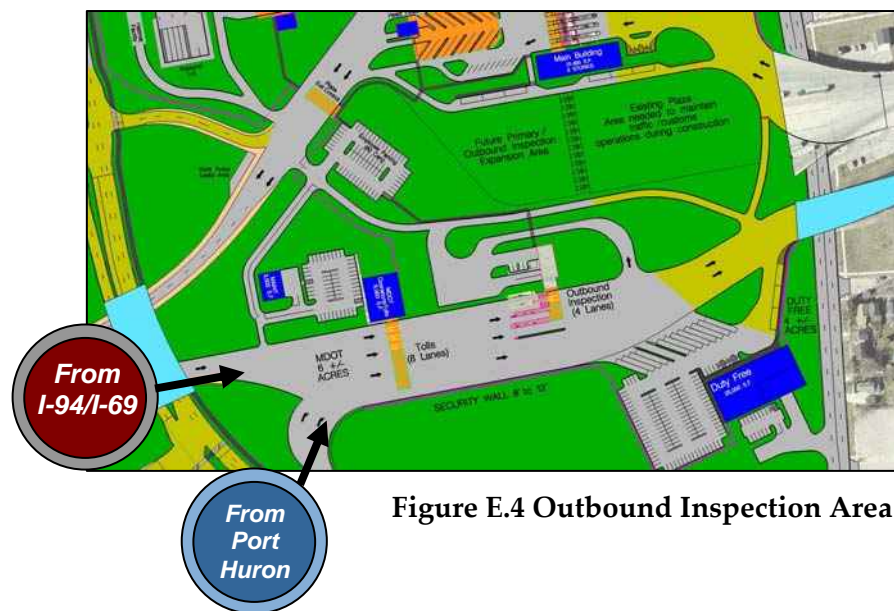


Figure E.4 Outbound Inspection Area

The plaza will also include parking for both MDOT and CBP plaza employees and visitors. The majority of CBP employee and visitor parking will be located in the northeast corner of the plaza. The proposed plaza will include separate secure lots for employees and visitors.

Improvements to the I-94/I-69 Corridor: The Recommended Alternative includes replacement and expansion of the Black River Bridge, the Water Street interchange and the Lapeer connector interchange. It also includes additional lanes on I-94/I-69, separation of eastbound border crossing traffic from local traffic, and a new Michigan Welcome Center in Port Huron Township. See **Figure E.5**.

Black River Bridge: The Recommended Alternative includes an expansion and replacement of the I-94/I-69 bridge over the Black River. The existing bridge is approximately 64-feet wide and has four travel lanes, two for eastbound traffic and two for westbound traffic along with narrow shoulders.

The new bridge will be approximately 200-feet wide and will consist of 12 spans. The new bridge will have nine travel lanes, three lanes for eastbound local traffic, three lanes for eastbound international traffic heading to Canada and three lanes for combined border crossing and local westbound traffic. The designated lanes for eastbound border crossing traffic will be barrier separated from the lanes for local traffic.

To reduce the potential for conflicts between border crossing traffic waiting to be inspected and local traffic, separate lanes for eastbound border and local traffic are provided between the Lapeer connector interchange and the plaza. The eastbound local M-25 connector traffic lanes will include three lanes connecting to relocated Pine Grove Avenue. At the intersection of the local lanes and relocated Pine Grove Avenue, traffic may turn left for northern destinations such as Fort Gratiot and northern St. Clair County, or right to access downtown Port Huron.

The new bridge will include 12-foot shoulders for emergency access/vehicle storage. The bridge will also have a 14-foot dual-direction non-motorized path. This path will be located on the south side of the bridge and will connect with the existing sidewalks along Water Street and the newly constructed non-motorized facilities along relocated Pine Grove Avenue.

I-94/I-69 Freeway Improvements: The Recommended Alternative includes resurfacing and expansion of 2.5 miles of

existing I-94/I-69. Much of the expansion includes an extension of the eastbound M-25 connector between the ramps to the existing plaza and the Lapeer connector. This will allow for the separation of local traffic from eastbound traffic crossing the border. Access from I-94/I-69 will be provided to the Water Street and the Lapeer connector interchanges.

Water Street Interchange: The Recommended Alternative includes the replacement of the existing interchange at Water Street including the Water Street Bridge over I-94/I-69. The replacement bridge will be two lanes wide, with one travel lane in each direction. Roundabouts are proposed for each end of the bridge at the freeway ramp intersections. The bridge will also accommodate pedestrian traffic by including one sidewalk, which will be a 10-foot sidewalk on the east side of the Water Street Bridge. For the visually impaired, a signalized pedestrian crossing can be provided.

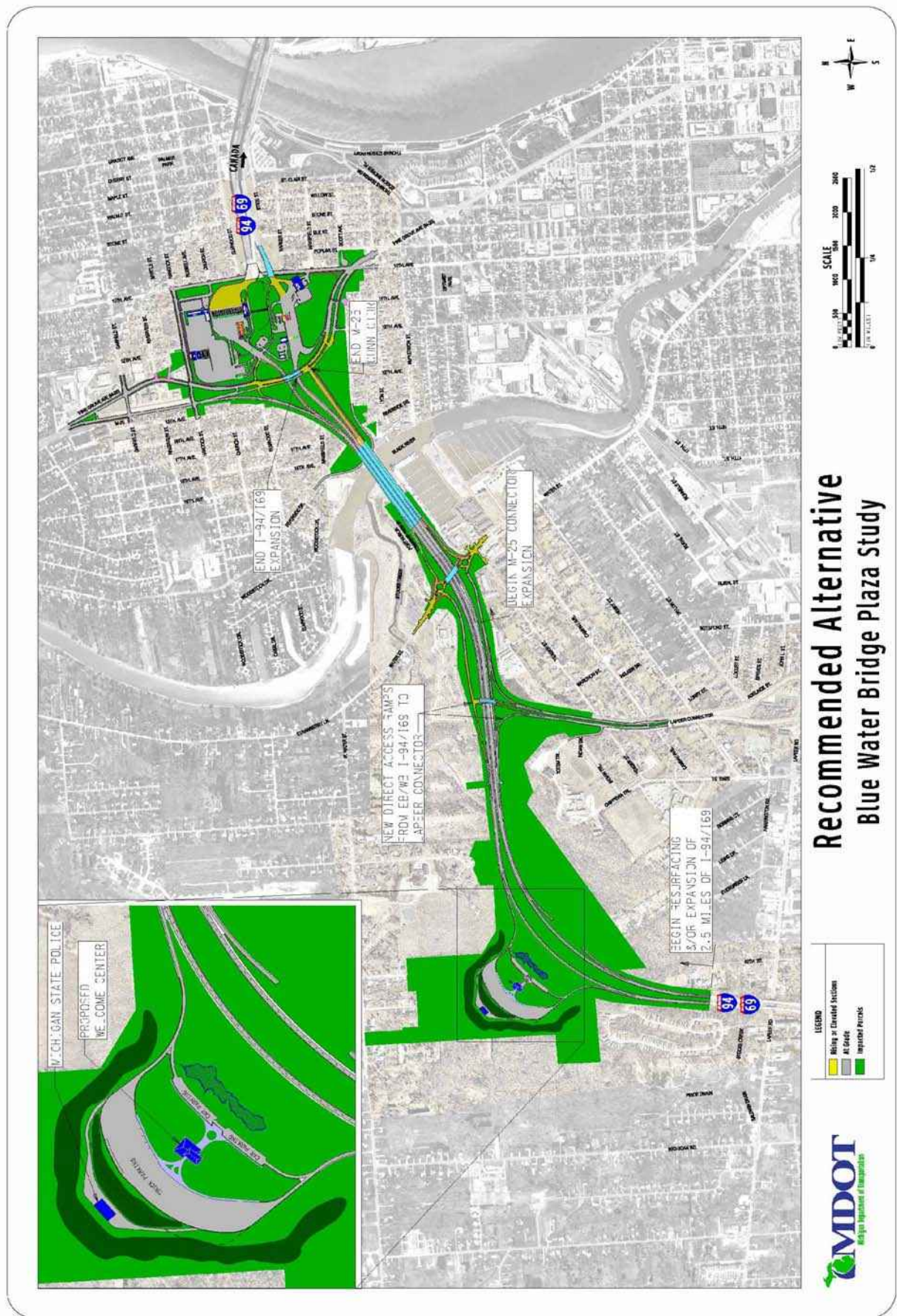


Figure E.5 Recommended Alternative and I-94/I-69 corridor

Lapeer Connector Connections: The Recommended Alternative will improve access for local traffic to the Lapeer connector. Currently, only traffic headed to I-94/I-69 east or from I-94/I-69 west can use the Lapeer connector. The Recommended Alternative provides access from all directions of I-94/I-69 as illustrated in **Figure E.6**.



Figure E.6 Lapeer connector interchange

New Michigan Welcome Center: The Michigan Welcome Center will be relocated to vacant land to the north of I-94/I-69 approximately one mile west of its current location. The Michigan Welcome Center layout has changed slightly since the DEIS. The new Michigan Welcome Center will consist of a modern building per MDOT's current design standards for welcome centers along with parking for up to 100 cars and 50 trucks. North of the truck parking area a Michigan State Police (MSP), Motor Carrier Inspection facility has been added. This facility will be used by MSP to assist in the enforcement of State of Michigan and Federal Motor Carrier regulations. The facility will include a weigh scale and a small inspection building. The new Michigan Welcome Center will encompass approximately 54 acres including the State Police facility.

Projected Travel Time Delays

In response to comments received on the DEIS, the Blue Water Bridge Study Team prepared a Travel Time Delay Study (see **Table E.1** for a Delay Analysis Summary). This analysis was

prepared to assess how the Recommended Alternative will perform compared to existing border crossing delays. The results show delay in the form of wait times and queue length at the existing plaza compared to the 2030 No-Build Alternative and the 2030 Recommended Alternative.

The 2030 No-Build results show that the existing plaza would experience greater delays and backups in 2030 than with existing traffic for commercial and passenger design hours.

The Recommended Alternative results show that all traffic in the passenger and commercial design hours can be adequately processed with minimal delay. The two scenarios modeled are based on the following factors:

- Proposed 2030 DHV forecast
- Average CBP processing times
- Fully staffed CBP booths
- A set booth configuration
- No downstream impact on booth operation

A full discussion of the Projected Travel Time Delays can be found in **Chapter 2, Section 2.3.4** of this **FEIS**.

Table E.1 Delay Analysis Summary

Model Output	Passenger Peak		Commercial Peak	
	Future No-Build	Future Build	Future No-Build	Future Build
Vehicles Processed per hour	814	1110	539	844
Average delay* (min/veh)	31.8	3.4	23.7	3.1
Maximum Queue Cars	1.7 miles	Within Plaza	Within Plaza	Within Plaza
Maximum Queue Trucks	1.5 miles	Within Plaza	Beyond Study Area (>1.8 miles)	Within Plaza
* Delay is the wait time required in addition to the time taken to drive the same distance at free flow speed. It does not include time spent in secondary inspection and only applies to primary inspection wait times.				

Cost Estimate of the Recommended Alternative



Existing Blue Water Gateway
Business District

Since the release of the DEIS, the Study Team has refined the cost estimate for the Recommended Alternative to reflect the changes made to the Recommended Alternative and additional engineering analysis. The cost estimate is based on the engineering level developed during the environmental process. During the final design process, a final estimate will be prepared and distributed to construction contractors. The actual costs will depend upon the bidding process, which contractors and their suppliers will eventually bid on and determine the price of the selected alternative.

This estimate includes a 15% contingency to cover unknown elements that will arise during design. This cost estimate is based on 2008 average unit prices tracked by MDOT.

MDOT estimates the earliest construction could begin on either the corridor or plaza project is 2011. The cost estimates in **Table E.2** are shown in 2008 dollars. In order to obtain a more realistic picture of the anticipated construction costs, MDOT must inflate these cost estimates to the year construction is anticipated to begin.

The U.S. cost includes the bridge, plaza, interchange, associated property (including purchase of mineral rights) and relocation of utilities. The costs in 2008 dollars have been adjusted for inflation to translate the total costs to year of expenditure. This total cost assumes completion of the entire project in 2017.

A week-long Cost Estimate Review was conducted March 16-20, 2009 involving cost specialists from FHWA, MDOT and their consultants. During this review, the Recommended Alternative cost estimates were updated using the FHWA level-of-confidence approach. A similar approach is used for all major projects, such as the Blue Water Bridge Plaza, to determine the risks and opportunities associated with project elements (i.e., what is the likelihood that costs might change from those now estimated?). At the 70% confidence level, the updated cost estimate for the Recommended Alternative is calculated to be \$583.5 million. This cost includes the U.S. plaza, the I-94/I-69 corridor and local street improvements. It

is recognized that this Recommended Alternative cost estimate may vary as risks and opportunities are encountered. That is why this cost total is somewhat greater than the base cost expressed in **Tables 2.3.14** and **2.3.15**. Continued attention will be directed to the cost issue throughout implementation of the Blue Water Bridge Plaza project.

The Recommended Alternative has been included in SEMCOG's fiscally-constrained Regional Transportation Plan and will be added to its Transportation Improvement Program (TIP) for 2009 prior to the signing of the Record of Decision.

Table E.2 Construction Cost Estimates

Cost Item	Corridor	Black River Bridge	Plaza	Total
Roadway Items	\$13,940,000	\$2,800,000	\$46,020,000	\$62,730,000
Drainage	\$1,700,000	\$580,000	\$2,820,000	\$5,100,000
Maintaining Traffic	\$1,460,000	\$300,000	\$4,110,000	\$5,870,000
Bridge Costs	\$6,020,000	\$28,500,000	\$10,650,000	\$45,170,000
Pavement Markings/Signs/Signals	\$1,720,000	\$530,000	\$3,800,000	\$6,050,000
Buildings/Miscellaneous	\$12,450,000	\$10,730,000	\$102,360,000	\$125,540,000
Sub-Station Relocation	N/A	N/A	\$20,750,000	\$20,750,000
ROW	-	-	-	\$150,000,000
CE Costs	\$3,690,000	\$4,300,000	\$16,160,000	\$24,150,000
Total	\$41,000,000	\$47,700,000	\$206,700,000	\$445,400,000
Source: Wilbur Smith Associates, 2008 2008 FEIS Total Cost Estimate = \$ 445,400,000 (includes Construction Engineering costs) 2007 DEIS Total Cost Estimate = \$ 433,000,000				

Based on past inflationary trends, MDOT utilizes an annual inflation of 5% for major road and bridge construction projects to project future construction costs. Using this assumption, MDOT estimates the following Year of Expenditure Costs for the project in **Table E.3** below.

Table E.3 Year of Expenditure Costs

Year of Expenditure Cost Estimate:	Corridor	Black River Bridge	Plaza & Local Road	Total
Construction Sub-total	\$43,179,000	\$50,244,000	\$225,635,000	\$319,058,000
Design/ROW/Misc.				\$213,566,000
Utility Relocations				20,750,000
TOTAL				\$553,374,000
Environmental Clearance				\$11,700,000
Source: Wilbur Smith Associates, 2008 Environmental Clearance cost not included in \$553,374,000 estimate Assumes Design occurs FY 2009-2011 Assumes ROW occurs FY 2009-2012 Assumes Construction occurs FY 2011-2016				

Funding/Implementation of Recommended Alternative

Following the issuance of the Record of Decision, MDOT will develop and submit to FHWA a financial plan for the project. This document will identify the detailed project costs and the proposed funding sources utilized to fund all phases of the project. The financial plan will be developed in compliance with FHWA's guidelines for Mega Projects (defined as any project over \$500 million). The document will be available for public review once published, and will be updated annually in accordance with federal guidelines.

Funding for the design, ROW, and construction phases of the project will likely utilize funds from the following sources:

- Federal Aid SAFETEA LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) Earmarks
- Federal Aid (Corridor and Border Improvement Program)
- Bonds backed by revenue from an updated GSA lease, an updated Duty Free lease, and BWB Toll Revenue

Any proposed toll increases on the U.S. side of the Blue Water Bridge will be completed in accordance with the existing toll agreement.

Public-Private Partnership (PPP) funding may be utilized to finance all or a portion of the plaza expansion project. During the financial plan development phase, MDOT and its

cooperating agency partners will make an assessment whether a public-private partnership can meet the following objectives:

- Maintain a safe and secure Blue Water Bridge crossing
- Conform with all CBP/GSA plaza requirements
- Ensure the efficient and integrated cross-border movement of people, goods, and services
- Minimize the use of public (state and federal) funds to the greatest extent possible
- Provide public transparency and accountability
- Protect the public interest

This evaluation is also being combined with legislative efforts to allow Michigan to enter into such agreements with private concessioners and to provide the underlying authority for the use of PPPs. It is expected that a resolution of this issue will be complete shortly after the Record of Decision.

How Will the Project Affect the Human Environment?

Land Use: Land uses within the Study Area include single family residential, multiple family residential, commercial, public facilities, and open space.

The No-Build Alternative would have few impacts on land use policies and decisions within the Study Area. Existing land uses would not be impacted because the plaza would maintain its current footprint and would not encroach upon the adjacent development. Commercial land uses around the Water Street interchange would be unaffected by a No-Build Alternative unless congestion of vehicles waiting to access the plaza increases to the point that it is impossible to access the interchange from I-94/I-69 on a regular basis.

The Recommended Alternative would impact existing residential and commercial development in the city of Port Huron. Residential areas both north and south of the existing plaza would be impacted along with the majority of the Blue Water Gateway Business Area. Businesses may be interested in relocating as close as possible to the new plaza which would potentially cause the conversion of homes immediately surrounding the plaza to business sites.



**Homes in the Neighborhood
Surrounding the Existing Plaza**

How Important is the Blue Water Bridge?

More than \$100 million of goods cross the Blue Water Bridge every day.

Communities and Neighborhoods: The Recommended Alternative would also affect the neighborhoods surrounding the plaza. Changes in the Recommended Alternative have resulted in a reduction of relocations from the release of the DEIS. The Recommended Alternative will now relocate 125 residents instead of 129. The Recommended Alternative will also increase the perception of the plaza as a barrier dividing the community from north to south. No publicly owned community facilities will be relocated. The Recommended Alternative will require property from the Port Huron Area School District adjacent to the Lapeer connector interchange but would not affect school buildings or facilities. The First Free Methodist Church next to the existing plaza will need to be relocated under the Recommended Alternative. **Table E.4** at the end of this Executive Summary summarizes key project impacts.

Environmental Justice: Upon completing the environmental justice analysis, the Study Team determined there are no disproportionately high and adverse human health or environmental impacts on minorities and/or low-income populations. Impacts of the Recommended Alternative would be similar for all groups regardless of demographic or socioeconomic characteristics of the community.

Businesses, Taxes, Trade, and Jobs: Continued border congestion caused by the No-Build Alternative will cost the economies of Michigan, the United States and Ontario, Canada up to \$3.9 billion by 2030. The Recommended Alternative would substantially reduce these losses.

The Recommended Alternative relocates 30 businesses, the same amount that was provided in the DEIS. Additionally six commercial-zoned vacant properties within the city of Port Huron's designated Blue Water Gateway Business Area will be eliminated.

The Recommended Alternative will maintain border traffic access to businesses remaining in the vicinity of the existing plaza by provided ramps between the plaza and the realigned Pine Grove Avenue. Travel times for cross-border traffic to access businesses in the vicinity of the plaza, along M-25, and

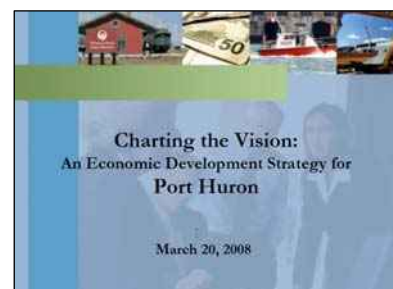
to downtown will improve during periods of high traffic volumes due to plaza improvements.

MDOT and the City recognize the importance of minimizing project related traffic impacts and will work with the local community to minimize disruptions to the greatest extent possible. During construction, traffic will be maintained using both part-width construction techniques and the use of detour routes. MDOT will make every effort to reach agreement with the City and County Road Commission engineering staffs on final goals and implementation strategies for project construction staging, prior to the beginning of construction. Preliminary planning goals for the project construction staging are:

- Provide two lanes of I-94/I-69 traffic in each direction
- All plaza operations will be maintained throughout construction with the aid of temporary connections
- Minimize Water Street and Lapeer connector ramp closures
- Maintain Water Street traffic over I-94/I-69 throughout construction
- Complete the upgraded Black River Bridge prior to beginning construction on the plaza
- Maintain two lanes of Pine Grove Avenue traffic in each direction
- Maintain access to businesses and minimize delay to thru traffic

The city of Port Huron would lose approximately 1.6 percent (\$12.9 million) of its existing property tax base if the Recommended Alternative is constructed. A possible result of the relocation of businesses could lead to the potential relocation of jobs outside of the community.

The Recommended Alternative would result in positive impacts on trade and commerce across the Blue Water Bridge through a reduction in travel times and congestion. Reduced congestion will lead to less uncertainty in border crossings, allowing firms that transport goods across the border to meet just-in-time delivery schedules with less warehouse inventory required.



Relocations: The DEIS stated that the Recommended Alternative would displace 129 residences and 30 businesses. As a result of feedback MDOT received regarding the size of the plaza and the number of relocations, the plaza footprint was reduced.

Relocation estimates are based on a worst-case scenario of acquiring all structures on parcels whose land is required for the Recommended Alternative. Most of the homes that may be relocated are owner occupied. Some multi-unit rental property relocations are required; a few of the relocations are single family home rentals. The Recommended Alternative will relocate 125 residences, and thirty businesses. MDOT will compensate homeowners who are relocated and assist with the relocation process. Replacement housing must be similar both in type and price range. No relocations will occur until it is shown that comparable housing is available (see the Conceptual Stage Relocation Plan in **Appendix A of this FEIS**).

Indirect and Cumulative Impacts: The Study Team identified potential indirect effects on land use, farmlands, traffic patterns, transboundary and wetlands. There are no significant indirect impacts on these elements from the Recommended Alternative.

The Recommended Alternative may encourage redevelopment of land north of Hancock Street as new or relocated businesses seek sites to serve both border crossing and local customers. This land has been previously developed.

Cumulative impacts for the Recommended Alternative associated with past, present, and future plaza development projects are from residential and business relocations and the effect on neighborhood stability in the vicinity of the existing plaza.

Aesthetic and Visual: The new plaza will have a dramatic effect on the visual quality of the area. Through meetings held with the city of Port Huron and St. Clair County officials, MDOT has committed to working with its federal, state and local

stakeholders to develop an Aesthetic Design Guide (ADG) for the project.

The ADG will identify aesthetic treatments to be considered for implementation during the design and construction phases. These recommendations will provide an overall design direction for both the corridor and plaza project areas to assure an overall continuity is achieved between these two work elements. The ADG will define an overall theme as well as specific community characteristics that can be incorporated in the corridor and plaza architectural elements to assure these infrastructure improvements reflect the Blue Water Community. See **Section 5.4** of this **FEIS** for more Aesthetic Design Guide details.

Cultural Resources: Although the layout of the Recommended Alternative has changed, this alternative will still acquire the block on which the National Register of Historic Places eligible, E.C. Williams House resides. The E. C. Williams House is eligible for the National Register of Historic Places and a Section 4(f) property. Based on the direct impact to the house, MDOT received concurrence from the State Historic Preservation Office (SHPO) March 15, 2007 that the Recommended Alternative will adversely affect this property. SHPO has concurred that relocating the house would be preferred to demolition. No archaeological resources are impacted by the Recommended Alternative.

Public Parks: There are three public parks located within or adjacent to the Study Area.

Neither Township Park No. 2 (the campground) nor Riverside Park will be impacted by the proposed project. Some minor property acquisition and impacts are anticipated with Township Park No. 1 for the construction of the proposed corridor improvements and interchange at Water Street under the Recommended Alternative.

MDOT coordinated with Port Huron Township officials and with the Township Parks and Recreation Commission regarding the potential impacts to Township Park No. 1. Meetings were held with the Township Supervisor and Parks and Recreation Commission to discuss the potential impacts to



Front View E.C. Williams House



Sign for Port Huron Township Park #1

What is Section 4(f)?

Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved which requires the "use" of any publicly owned land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent alternative to the use of such land.

the park. The Township has concurred that the proposed project will have minimal effects on Township Park No. 1, and as a result, the potential impacts to Port Huron Township Park No. 1 have been determined by FHWA to be *de minimis* under Section 4(f). The No-Build Alternative will have no effect on Port Huron Township Park No. 1.

How Will the Project Affect the Natural Environment?

Air Quality: The project has the potential to improve air quality at a regional level, since the objective is to reduce backups and idling caused by existing delays for both in-bound U.S. and out-bound traffic at the current plaza. The Recommended Alternative will be better equipped to handle trucks that are part of the Free and Secure Trade (FAST) program. More trucks in the program will likely result in fewer trucks at other primary booths and less trucks in the secondary inspection area. Less vehicle queues are anticipated as the number of inspection booths are proposed to increase. Improvements to the plaza will be in conformity with the State Implementation Plan (SIP) for ozone and particulates and, in conformity with the regional Transportation Improvement Plan (TIP).

Noise: The Study Team measured existing noise levels in areas potentially affected by noise from a new plaza and used the FHWA's Traffic Noise Model (TNM) to forecast future noise levels for the alternatives. The design hour noise levels projected for the Recommended Alternative differ slightly from the City West Alternative as described in the DEIS. The changes in noise levels occurred as a result of more uniform treatment of traffic operations within the TNM model, as a response to concerns raised during the public comment period. None of these changes resulted in more properties being exposed to noise levels above FHWA's Noise Abatement Criteria (NAC).

The No-Build Alternative would have traffic noise levels that approach or exceed the NAC at 101 residences, six businesses, and in one township park.

The Recommended Alternative would cause 2030 design hour noise levels to approach or exceed the NAC at 59 residences

and three businesses including one hotel/motel, and at one township park. None of the noise receivers would be exposed to noise levels that “substantially exceed existing” noise levels.

Groundwater, Drainage and Surface Water Quality: No impacts are anticipated to groundwater resources. The Study Area does not contain any Sole Source Aquifers or Critical Aquifer Protection Areas.

The Recommended Alternative will increase the amount of stormwater drainage within the Study Area. Stormwater detention basins will be constructed to control the amount of water discharged to match the existing discharge quantities and preserve surface water quality. All stormwater run-off will be directed through buffer areas prior to discharging into any of the surrounding surface water features. This will help filter any sediments or pollutants contained in the stormwater run-off.

Floodplains: All of the Build Alternatives would involve construction within the 100-year floodplain. Efforts have been made to develop the alternatives to ensure that there will be no impacts to the floodplain which would cause additional flooding to properties in the surrounding area. Any impact to the 100-year floodplain will be offset by providing additional storage capacity for floodwaters. To ensure that all environmental and hydraulic impacts associated with the floodplain crossings of the project are minimized, further evaluation of crossing options will be conducted during the design phase.

Wetlands: None of the alternatives would have wetland impacts that would be considered significant. The Recommended Alternative would impact approximately 4.36 acres of wetlands. These wetlands have relative low value, function and floristic significance.

MDOT will restore previously existing wetlands or create new wetlands to replace those that would be impacted. Current policy dictates that forested wetlands will be replaced at a ratio of 2:1, while emergent, scrub/shrub, and open water wetlands will be replaced at a ratio of 1.5:1.

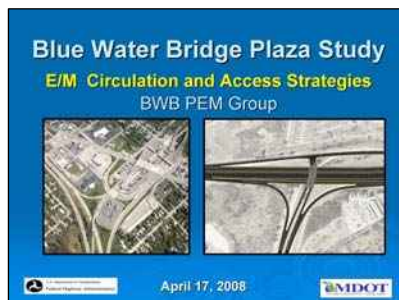


Scrub-shrub/forested
wetland

Contaminated Sites: The Study Team identified 20 potentially contaminated sites. The No-Build Alternative would not affect any of these Recognized Environmental Conditions (RECs). Eighteen of these sites could be affected by construction as part of the reconstruction of the existing plaza under the Recommended Alternative. Impact to two sites would occur by reconstruction of the Water Street interchange.

How will the Study Team Mitigate or Reduce the Impacts to the Built and Natural Environments?

MDOT created the Project Enhancement and Mitigation (PEM) group to identify project mitigation and enhancement measures for the Blue Water Bridge Plaza Study. In efforts to eliminate, reduce, or control the negative effects of the project MDOT and FHWA will mitigate for the social, economic and environmental affects of the final alternative selected for design and construction. This will include traditional mitigation measures as well as providing economic development assistance.



Project Enhancement and Mitigation Measures: For the Blue Water Bridge Plaza Study, an interagency working group was formed to identify project mitigation and enhancement measures. This group, called the Project Enhancement and Mitigation Group (PEM), was made up of local, state, and federal officials. The PEM Group met monthly covering specific enhancement and mitigation topics which were identified as areas of concern through agency and public comments on the DEIS. In total, nine meetings were held with the PEM Group between February 2008 and November 2008.

MDOT commits to adding approximately **\$13.1 million** of project enhancements to the project design. These enhancements have been developed to address the direct and indirect impacts of the project in the areas of economic development, tourism, local circulation and access, emergency response and non-motorized mobility. As the owners, operators and tenants MDOT, FHWA, GSA and CBP all believe these enhancements will help reduce the overall impact of the project. MDOT believes these enhancements can help align Port Huron's existing assets, which will allow the community to leverage the long-term economic benefits this

large-scale project can generate. A full discussion of the Project Enhancement and Mitigation measures is located in **Chapter 5** of this FEIS.

What type of Economic Assistance will the Community Receive?

Economic Development Assistance: The Michigan Department of Transportation has incorporated several enhancements into the project that are designed to improve economic and community redevelopment opportunities within greater Port Huron. MDOT commits to continue coordination efforts with other state and federal agencies to bring additional resources to the greater Port Huron community.

In collaboration with the Greater Port Huron Chamber of Commerce, MDOT will fund an addition to the Chamber's office for the purposes of housing a local visitor center. This facility will be used to disseminate local tourism information and promote tourism and economic development opportunities which exist within the Port Huron community.

How Did the Study Team Coordinate with the Public and Stakeholders?

The Study Team conducted an extensive process of public and stakeholder coordination to obtain input, identify local concerns, revise proposed alternatives, and better understand the impacts of the alternatives on the natural and built environment. The Study Team, utilizing a Context Sensitive Solutions Approach, conducted an extensive process of public and stakeholder engagement to obtain input, identify local concerns, revise proposed alternatives, and better understand the impacts of the alternatives on the natural and built environment. The Study Team has held six public meetings, Community Involvement Workshops, over 40 local stakeholder meetings and eight Project Enhancement and Mitigation meetings. Newspapers, a project website, a toll free phone number, an e-mail list-serve, and newsletters were also used to provide information about the study and receive public input. The Study Team used public and stakeholder feedback to assist in the refinement of the Recommended Alternative. Additionally, since March 2, 2007, the Study



Public meeting

What is a Cooperative Agency?

An Agency that has special authority or expertise over the construction of a project. There is enhanced communication and cooperation between cooperating agencies and the agency proposing the project.

Team has held office hours in Port Huron on the first and third Friday of each month to address concerns and questions and provide answers on the project.

Five federal agencies are serving as cooperating agencies for this project and assisted the Study Team in the development and analysis of the alternatives. These agencies include: Customs and Border Protection (CBP), General Services Administration (GSA), the United States Army Corps of Engineers (USACE), the Environmental Protection Agency (EPA), and the United States Coast Guard (USCG). The Study Team also has worked with Blue Water Bridge Canada, who own and operate the Canadian side of the Blue Water Bridge, and other Canadian stakeholders in the development and evaluation of the alternatives.

The DEIS was signed on August 10, 2007. A public hearing for the Blue Water Bridge Plaza Study was held October 9, 2007. The public hearing provided an opportunity for the Study Team to share with the public information about the study and allowed the public to voice concerns and opinions regarding the Blue Water Bridge Plaza Study in Port Huron, Michigan. The hearing provided one-on-one interaction with Study Team members and an explanation of the study for the public through exhibits and presentations. A court reporter was also made available to all attendees. The public hearing took place during the 120-day public comment period for the Draft Environmental Impact Statement. Responses to comments received during the comment period can be found in **Chapter 7 of this FEIS**.

What Are the Next Steps For the Blue Water Bridge Plaza Study?

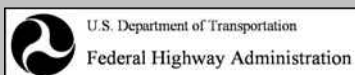
No sooner than 30 days after the publication of the final EIS notice in the Federal Register the FHWA will issue a Record of Decision, the next step in the U.S. environmental clearance process.

Design and Right-of-Way acquisition activities are anticipated to take approximately three years to complete. The earliest construction could begin is 2011 on the I-94/69 corridor.

Table E.4 Summary of Impacts

Summary of Impacts		No-Build	City West Alternative (Recommended Alternative)
Potential Impacts:			
Social	Public Recreational Land Impacts	0	1
	Neighborhoods / Subdivision Impacts	0	3
	Community Facilities (Churches, Schools etc.) (#)	0	1 Church, requires property from school district
Relocations	Estimated Residential Relocations (#)	0	125
	Estimated Commercial Relocations (#)	0	30
	Existing DTE Substation	No	Yes
River/Stream/Drain Crossings (#)		0	2
Ecological Resources	Total Wetland Impacts (acres)	0	4.36
	Threatened and Endangered Species Impacts	0	0
Cultural Resources	Historic Buildings/Site Impacts (#)	0	1
	Archaeological Site Impacts (#)	0	0
Noise	Residences Impacted by noise levels that exceed noise abatement criteria	101	59
Potential Contaminated Site Impacts (# of Sites Impacted)		0	20
Traffic Movement	Grade Separations (#)	6	6
	New or Modified Signalized Intersections/Roundabouts (#)	0	8
	Local Road Closures, Rerouting, or Cul de Sacs (#)	0	11
Right-of-Way	CBP plaza space (including existing plaza re-use) (acres)	18	46
	Total new right-of-way required (acres) - Includes: Plaza, new Pine Grove Avenue, Corridor and Welcome Center	0	129
	(Includes Engineering)		
Cost	Construction Cost (\$2008 Millions)	\$0	\$319
	Right-of-Way Cost/Design/Misc (\$2008 Millions)	\$0	\$214
	Utility Relocations (\$2008 Millions)	\$0	\$21
	Total Estimated Cost (\$2008 Millions)	\$0	\$554
	Environmental Clearance (\$2008 Millions)	\$0	\$12

Blue Water Bridge Plaza Study



Based on the best information available as of 3-20-09

CHAPTER 1

WHY ARE IMPROVEMENTS NEEDED?

This chapter provides a full discussion of the purpose and need for the Blue Water Bridge Plaza Study, including updates from the Draft Environmental Impact Statement (DEIS). Included is additional information supporting the justification for the project and specific requirements of Customs and Border Protection, which necessitate the expansion of the Port Huron Land Port of Entry.

Unlike other sections of this condensed Final Environmental Impact Statement (FEIS), this chapter describes the purpose and need in its entirety, including those sections which remain unchanged from the DEIS, as it provides a basis for understanding. It identifies key issues and provides a detailed explanation of the need for improvements to the Blue Water Bridge Plaza.

The United States Plaza, which is owned by the Michigan Department of Transportation (MDOT), is the inspection facility for vehicles entering the United States at Port Huron. The Blue Water Bridge is a major border crossing for cars and trucks between the United States and Canada. The Blue Water Bridge consists of two bridge spans over the St. Clair River, one for eastbound traffic to Canada and one for westbound traffic to the United States. The bridges are jointly owned by the MDOT and Blue Water Bridge Canada (BWBC). Federal agencies operating on the plaza include the U.S. Customs and Border Protection (CBP), the United States Department of Agriculture (USDA) and the United States Food and Drug Administration (FDA). These agencies are responsible for inspecting vehicles, goods and people entering the United States. The inspection agencies rent facilities on the United States Plaza from MDOT through the General Services Administration (GSA), which provides buildings for the federal government.

MDOT collects tolls on the plaza from vehicles leaving the United States for Canada and the Michigan State Police operate a truck weigh scale on the plaza.



Existing United States Blue Water Bridge Plaza

The existing Blue Water Bridge Plaza is approximately 18 acres including inspection facilities and parking. The existing plaza is elevated approximately 24 feet above street level to accommodate Pine Grove Avenue, which runs underneath.

1.1 Study Location

The Study Area begins at the western end of the twin Blue Water Bridge spans and ends at the I-94/I-69 interchange, approximately three miles to the west. These connections will provide highway/freeway access to destinations across Michigan, 47 other states, Mexico and Canada as illustrated in **Figure 1.1 Location Map** and **Figure 1.2 Study Area**.



The Canadian side of the Blue Water Bridge and Canadian Plaza are operated by Blue Water Bridge Canada (BWBC)

The need for improvements to the United States Plaza and the I-94/I-69 corridor leading up to the Blue Water Bridge is supported by several key issues including:

- Security needs
- The introduction of new inspection technologies, procedures and policies
- Limited existing space on the plaza
- Traffic conflicts and crash history
- Access between the plaza and adjacent local roads
- Traffic growth
- Traffic backups
- Existing infrastructure conditions of the I-94/I-69 corridor
- Upgrading the welcome center

1.2 Validation of Project Limits

The overall project study limits encompass approximately 923 acres of residential, commercial and recreational use that surround the existing plaza and extend west along I-94/I-69 (**Figure 1.2 Study Area**). The Study Area includes the Black River Bridge, the Water Street interchange, the Lapeer connector interchange and the location for the new welcome center in Port Huron Township. The projects limits are considerably larger than the proposed plaza, as the Study Area encompasses the area of potential effect for the entire project. This includes adjacent residential, commercial and recreational areas that may be affected by Blue Water Bridge Plaza Improvements.



Figure 1.1 Location Map

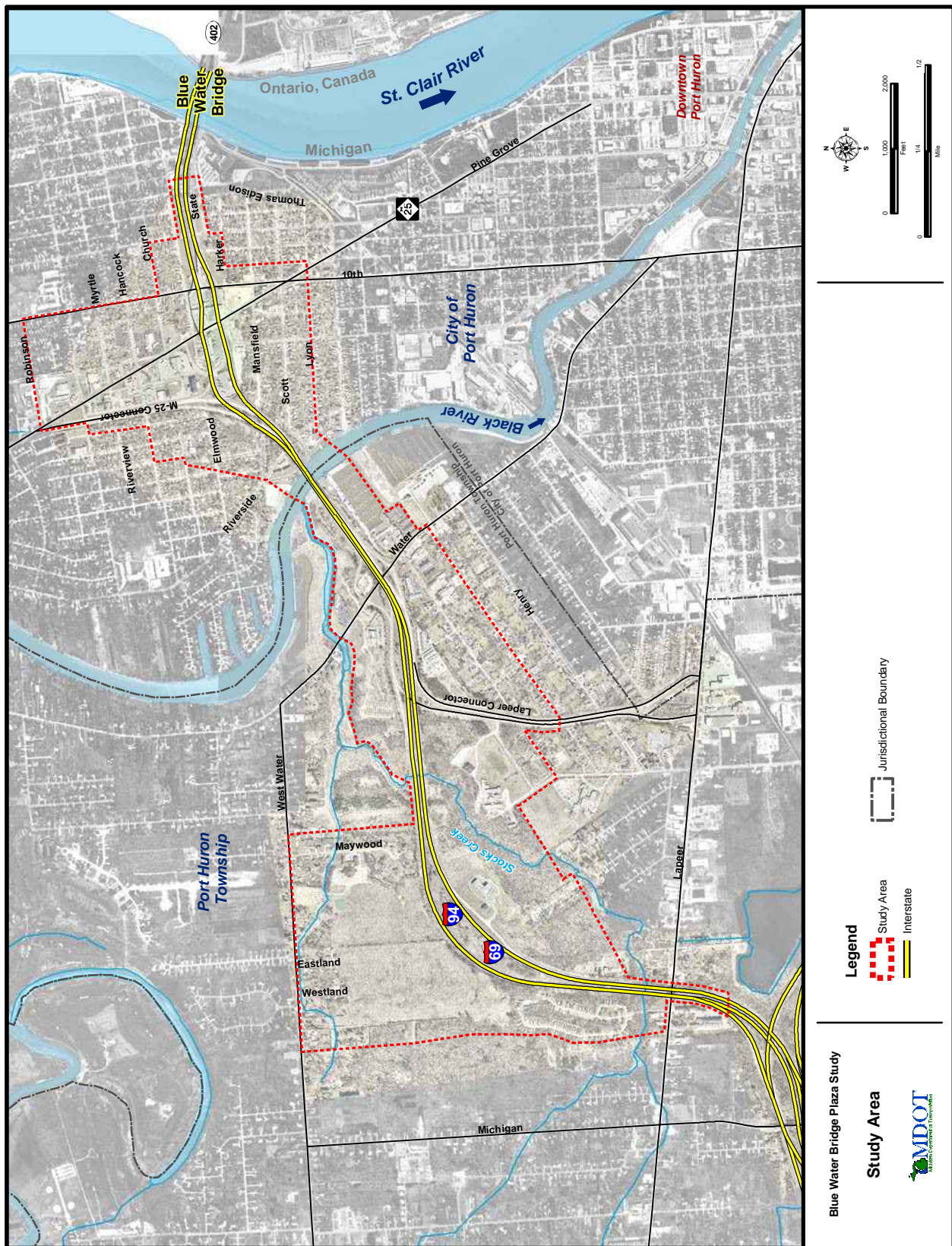


Figure 1.2 Study Area

1.3 What Business is Conducted on the United States Plaza?

Before entering the U.S., all vehicles must be processed at CBP's primary inspection booths. CBP's border operations require that commercial traffic be separated from auto and bus traffic.

CBP's primary mission is to secure the border while facilitating legitimate trade and travel. Other federal agencies operating on the plaza include the USDA and the FDA. These agencies are responsible for inspecting vehicles, goods and people entering the United States.

As previously noted, MDOT collects tolls on the plaza from vehicles leaving the United States for Canada and the Michigan State Police have a truck weigh scale on the plaza.

Primary Inspection: Primary inspection is the first point of contact between CBP inspection officers and passengers, vehicles and cargo entering the United States. Cars, buses and trucks that require no further questioning or inspection and have their paper work in order are allowed to exit the plaza following primary inspection.

Passenger Secondary Inspection: Passengers in cars requiring additional paperwork or questioning are sent to passenger secondary inspection for a follow-up interview conducted by CBP, USDA, or the FDA.

Commercial Secondary Inspection: Commercial shipments requiring further paperwork, processing and/or inspection by CBP, USDA, or the FDA are sent to the commercial secondary inspection facilities. At commercial secondary inspection, trucks must park and individuals must go inside for further questioning and to process paperwork. Cargo may also be inspected. If the paperwork for the cargo is incomplete, the truck driver will visit a customs broker to complete the necessary paperwork required by CBP. Customs brokers are private firms with office space in the existing inspection building. Animal inspections are conducted by USDA at an off-site location on Wadhams Road.



Primary Inspection Lanes

1.4 What is the History of the Blue Water Bridge and Plaza Improvements?



The original Blue Water Bridge on the left was built in 1938. The second bridge was built in 1997.



Elevated Plaza at Pine Grove Avenue

The original Blue Water Bridge was opened on October 10, 1938 and was operated by the Michigan State Bridge Commission. In 1965, operation of the bridge and plaza was transferred to MDOT, then called the Department of State Highways.

The United States Plaza at the Blue Water Bridge was first expanded in the 1950s and a ramp was added over M-25 (Pine Grove Avenue) to connect with the Port Huron bypass (now I-94/I-69), which was under construction at the time. Prior to this expansion, the entire plaza was located between Pine Grove Avenue and 10th Avenue. In 1983, MDOT completed Draft and Final Environmental Impact Statements, which recommended improvements to the United States Plaza and the construction of a second bridge. In 1991, the final link of I-69 was built, completing a second freeway connection (Toronto to Chicago) via the bridge. During the 1980's and early 1990's, the plaza was expanded to include 13 primary inspection booths for inbound traffic from Canada. Five outbound toll lanes and the secondary inspection facilities that exist on the elevated plaza today were also added as a part of the expansion.

In 1992, an international task force studying the Blue Water Bridge crossing concluded that the existing bridge did not have enough capacity for all vehicles wanting to cross and the existing bridge needed long-term maintenance; therefore a new bridge should be constructed. An environmental document that served as a Re-evaluation Document for the 1983 FEIS and met the requirements of both the U.S. and Canadian environmental processes was completed in 1994. Construction on the second Blue Water Bridge span began in 1995 and it was opened to traffic in July 1997. Each bridge has three lanes of traffic with the original bridge carrying traffic from Canada to the United States and the new bridge carrying traffic from the United States to Canada.

Rapid increases in the growth of truck traffic and international trade called for additional improvements on the U.S. plaza as well. In 1999, MDOT completed a Toll and Plaza Operations

Study to identify short-term operational improvements and to propose potential long-term plaza improvements. As a result of this study, several short-term operational improvements were made including the conversion of MDOT's maintenance facility to additional truck parking and the expansion of space for customs brokers.

Additionally, the events of September 11, 2001 have forever changed the way security measures are implemented at our nation's borders. The physical security of the border crossing itself and the border crossing facilities and processes must be protected from interruptions due to man-made or natural calamities. These may include threats of terrorism or sabotage, aging or failing infrastructure, or other natural disasters. Assuring homeland security requires the border be protected from potential disruptions caused by terrorist actions.

Security at the border is of critical importance. It entails; 1) providing a reasonable assurance that cross-border movements and trade will not be disrupted; and, 2) providing adequate facilities for the processing and screening of people and goods passing between Canada and the United States. Although increased scrutiny of people and goods moving across the border also enhances the security of those who live and work nearby, i.e. Port Huron, this increased scrutiny does take more time and thereby reduces the processing capacity at the border. This results in the need for expanded processing capacity for border security to conduct their operations.

In September 2002, MDOT began the current study.

1.5 Purpose for Project

The Purpose of the Blue Water Bridge Plaza for the foreseeable future is to:

- Provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Port Huron area to support the economies of Michigan, Ontario, Canada and the United States
- Support the mobility and security needs associated with national and civil defense



**Existing United States Plaza
Looking West**

Several federal agencies and the Michigan State Police inspect trucks, cars, passengers and cargo on the plaza, which is owned and operated by MDOT. To assist in defining the reasons for the proposed improvements, MDOT, FHWA and two of the six cooperating agencies, CBP and GSA created an Advisory Committee comprised of representatives from the United States and Canadian plaza user agencies as well as local, state and federal officials.



Toll Booths on the Existing Plaza

The following is the list of reasons for improvements developed with assistance from the Advisory Committee. This is called the purpose of and need for the project.

- Improve operations and processing capability by accommodating the latest inspection technologies and procedures
- Provide flexibility to accommodate future inspection technologies and procedures
- Improve security
- Provide facilities that ensure cars and trucks do not leave the plaza without being inspected
- Improve safety on the bridge, plaza and the I-94/I-69 corridor, including the elimination of the traffic weaves
- Accommodate projected 2030 traffic growth and future facility needs
- Minimize backups on Highway 402 in Canada and I-94/I-69 in the United States
- Reduce vehicle and pedestrian conflicts on the plaza
- Improve access to the plaza and to the local road network
- Minimize routing of commercial traffic to local roads during maintenance operations
- Create a more visible and accessible welcome center
- Improve infrastructure conditions along the I-94/I-69 corridor including the aging Black River Bridge

These reasons form the basis for the purpose of the study, which is detailed in the sections below.

1.5.1 New Inspection Technologies and Procedures Require More Space

CBP's mission and operations, as directed by the Department of Homeland Security, are continuously under review for

changes that will make border crossings safer and more efficient. Additional security measures and technologies are constantly being introduced at Land Ports of Entry across both the northern and southern U.S. borders. As old equipment and methodologies become obsolete, new ones must take their place. Providing a flexible plaza layout to accommodate these changing technologies is critical to the operational success of CBP and other federal inspection agencies working on the plaza.

One recent example of these changing requirements is the Western Hemisphere Travel Initiative (WHTI) for U.S. citizens crossing U.S. borders by land or sea. WHTI is the U.S. government's plan to conform to the provisions of the Intelligence Reform Terrorism Prevention Act of 2004, which requires citizens of the U.S., Canada and Mexico to have a passport or other designated document that establishes an identity for individuals who wish to enter into the United States. In response to this requirement, CBP will utilize Radio Frequency Identification Readers (RFID) technology at many of its larger ports of entry, like Port Huron. This technology wirelessly reads those travel documents that have a specially designed RFID tag, such as the new U.S. passport card or Michigan's enhanced driver's license. It is anticipated that this technology will enhance both the security and efficiency of border crossings. However, this technology also adds additional dedicated space to each primary inspection lane in order to accommodate the RFID reader and have the necessary vehicle separation to obtain accurate readings.

Another example of changing CBP operational technology requirements is the greater reliance upon the use of Non-Intrusive Inspection (NII) technology in the secondary commercial area. NII technology is used to scan freight contained on and in trucks, cargo containers and cars. This equipment is now required at United States/Canada border crossings. A temporary enclosed NII unit has been introduced at the Blue Water Bridge and has reduced the available space for secondary inspections.

A permanent building to house NII equipment requires more than one-half acre of land. In order to process the volume of



NII Building on Existing Plaza

commercial traffic expected on the Blue Water Bridge four NII units (two permanent and two mobile), will be required.

The space to put additional new or updated inspection technologies and procedures required by inspection agencies is severely limited on the existing 18 acre plaza. The following are additional new technologies and procedures either recently introduced or soon to be required at all Land Ports of Entry that must be accommodated at the Port Huron port of entry.



Radiation Detection Portals

Radiation Detection Portals: Radiation Detection Portals monitor radiation levels to ensure no one brings radioactive material into the United States. Radiation Detection Portals have been installed in advance of all inspection booths at major border crossings including the Blue Water Bridge. A designated Radiation Detection Portal and containment area in secondary inspection is also required. For future primary inspection, 20 Radiation Detection Portals (with future expansion to 30) are needed and it is estimated that secondary inspection will need one Radiation Detection Portal. The existing plaza has a secondary Radiation Detection Portal, but no space for a designated containment area.



Automated License Plate Readers

Indoor Cargo Docks/Warehouse Space: Most major commercial border crossing plazas between the United States and Canada feature indoor cargo unloading docks and warehouse space. Due to space limitations, unloading of vehicles for inspection at the Blue Water Bridge Plaza must currently be done at off-site locations. Inspection officials propose that a border crossing with as much commercial activity as the Blue Water Bridge should have at least 20 indoor unloading bays and adequate warehouse space to store cargo.

Export Control/Outbound Inspection: Outbound inspection booths and facilities will also be required to allow CBP to enforce export control regulations and to allow the inspection of certain individuals leaving the country. Currently CBP conducts random exit control interviews by flagging down outbound vehicles after they pass through the toll plaza. These inspections can cause backups on I-94/I-69 and congestion on the outbound part of the plaza.

FAST: Free and Secure Trade (FAST) is a program between the United States and Canada. The FAST program achieves its objective of expedited processing through the use of advanced technology to improve the efficiency of screening and clearing. Key to the effectiveness of this program is providing dedicated lanes for use by FAST vehicles. The implementation of FAST at the Blue Water Bridge began in December 2002.

NEXUS: NEXUS is a program that allows pre-approved low risk travelers to enjoy a simplified border crossing process. NEXUS pass holders can use dedicated lanes at border crossings, thereby reducing their waiting time.

Automated License Plate Readers: Cameras photograph the license plates of all vehicles prior to entering the primary inspection booths. A computer matches the license plate photograph to a variety of databases and provides any relevant information to the inspection officer during the inspection process. These license plate readers have been installed at all booths on the plaza and require extra waiting space for vehicles to ensure accurate pictures are taken.

Canine Facility: During the DEIS process, CBP officials requested permanent space for a canine inspection team facility. However, the facility has been eliminated from the proposed plaza as part of the plaza refinement following the DEIS.

The new technologies and procedures described above are all current or short-term foreseeable requirements. However, inspection technology and processes are constantly evolving. Likewise, operational decisions made at other adjacent northern border ports of entry and by the other agencies working on the Port Huron port of entry, including the U.S. Department of Agriculture, the Food and Drug Administration, the U.S. Fish and Wildlife Agency and the Federal Motor Carrier Agency may change over time. For these reasons, maximum flexibility must be built into the plaza layout.

1.5.2 Improving Security

Plaza facilities at the Blue Water Bridge must fulfill CBP's primary mission which is to secure the border while facilitating legitimate trade and travel. The key security elements for CBP include:

- Interdiction and containment of hazardous materials, contraband and unauthorized people from entering the country including terrorists and their instruments
- Vulnerabilities to terrorist attacks
- Location and distribution of inspection staff and resources
- Personal safety and security for inspection agents, plaza staff and plaza users.

The following are security related improvements needed at the Blue Water Bridge to accommodate new security requirements.

Currently there are no gates or checkpoints at the exit from the plaza. There is a need for exit control from commercial secondary inspection so CBP can ensure that vehicles sent to secondary inspection have completed the necessary paperwork and/or inspection before leaving the facilities.

For the overall security of the crossing itself, provide clear improvement by reducing the number of overpasses (the plaza is currently built over Pine Grove Avenue) that would be vulnerable to an attack from below.

Clear sightlines between primary and secondary inspection areas are essential to ensure vehicles sent to secondary inspection actually go there. The current plaza secondary inspection area entrance is adjacent to the freeway exit which makes it difficult for CBP to monitor.

The existing plaza facilities lack adequate secure parking for employees, impounded vehicles and specific parking spaces to quarantine suspicious vehicles. Due to the limited amount of office space on the plaza, enforcement functions of CBP are forced to share space with public enrollment in border crossing programs (e.g. FAST/NEXUS). Due to evolving

security concerns, representatives from CBP have requested more space.

Emergency vehicle access to the existing plaza is limited due to the elevated nature of the plaza.

1.5.3 Limited Existing Space on the Plaza

Over the past three years, the federal inspection agencies have been dedicating more personnel to the Canadian border, partially as a result of the September 11, 2001 terrorist attacks and increased border security measures. Approximately 485 individuals including 227 federal inspection agents, 38 MDOT employees and approximately 220 customs brokers' staff, work on the United States Plaza, which is open 24-hours a day, seven days a week.

The existing facilities do not have enough space to accommodate new inspection requirements and procedures and the increased number of newly trained agents. Among the issues of concern is a lack of space in the secondary inspection area along with limited locker and desk space for new agents, lack of public counter space and a lack of adequate secure parking.

1.5.4 How Much is Traffic Going to Grow on the Blue Water Bridge?

Proposed improvements must provide large enough plaza facilities to accommodate projected 2030 traffic levels in terms of inspection and toll booths, parking facilities, space for waiting traffic and access ramps. The Michigan Transportation Plan (State Long Range Plan - SLRP) recognizes the Blue Water Bridge as a vital part of Michigan's infrastructure and economy, thus it must accommodate current and forecasted traffic levels. Expanding the existing Blue Water Bridge itself was not identified as a need as part of MDOT's SLRP, as both bridge spans are forecast to have adequate traffic capacity beyond 2030.

Historic Traffic Growth: The number of trucks entering the United States via the Blue Water Bridge increased by approximately 132 percent between 1990 and 2000. Outbound

trucks heading for Canada via the bridge increased by 139 percent over the same ten-year time period. The September 11 terrorist attacks in 2001 contributed to a decline in the growth rate of truck traffic through 2005 to ten percent, however, Canada bound truck traffic grew at a quicker rate of 17.6 percent over this five-year period. **Table 1.1** illustrates the growth in truck traffic crossing the Blue Water Bridge between 1970 and 2005.

Table 1.1 Truck Traffic Using the Blue Water Bridge

Year	Annual Trucks		Average Daily Traffic		Annual Growth Rate*		
	Westbound into the U.S.A.	Eastbound into Canada	Westbound into the U.S.A.	Eastbound into Canada	Annual Growth Rate Period	Westbound into the U.S.A.	Eastbound into Canada
1970	95,600	93,800	262	257	-	-	-
1980	106,600	106,700	292	292	1970 to 1980	1.1%	1.3%
1990	361,200	308,900	990	846	1980 to 1990	13.0%	11.2%
2000	837,000	739,800	2,293	2,027	1990 to 2000	8.8%	9.1%
2005	920,530	870,160	2,522	2,384	2000 to 2005	1.9%	3.3%
* Annual Compounded Rate							

The rapid truck growth prior to 2001 can be attributed to several factors, including completion of Highway 402 in Canada in 1982 and completion of I-69 between Port Huron and Indianapolis, Indiana in 1992. In 1989, the United States-Canada Free Trade Agreement was implemented, followed in 1994 by the North American Free Trade Agreement (NAFTA). These trade agreements helped create strong growth in international trade and commercial traffic between the United States and Canada. For the purposes of this study two potential options of truck growth were looked at to depict a high and a low growth option. The traffic analysis was developed based on the high growth option as discussed in **Traffic Growth to the Year 2030** on the next page.

Passenger vehicle crossings at the Blue Water Bridge declined 23 percent between 1990 and 2005. **Table 1.2** illustrates the trends in passenger vehicle crossings at the Blue Water Bridge since 1970. New shopping centers in Port Huron along with the strong value of the Canadian dollar led to significant

growth in passenger vehicle crossings in the late 1980's and early 1990's. This growth subsided in the late 1990's due in part to the decline of cross-border shopping and the weakening value of the Canadian dollar. The September 11, 2001 terrorist attacks also resulted in fewer passenger vehicle crossings.

Table 1.2 Passenger Vehicles (Cars, Vans and Light Trucks) Using the Blue Water Bridge

Year	Annual Passenger Vehicles		Average Daily Traffic		Annual Growth Rate*		
	Westbound into the U.S.A.	Eastbound into Canada	Westbound into the U.S.A.	Eastbound into Canada	Annual Growth Rate Period	Westbound into the U.S.A.	Eastbound into Canada
1970	1,124,200	1,126,000	3,080	3,085	-	-	-
1980	1,656,700	1,671,200	4,539	4,579	1970 to 1980	4.0%	4.0%
1990	2,422,900	2,417,200	6,638	6,622	1980 to 1990	3.9%	3.8%
2000	2,224,600	2,165,700	6,095	5,933	1990 to 2000	-0.9%	-1.1%
2005	1,865,150	1,849,820	5,110	5,068	2000 to 2005	-3.5%	-3.1%
* Annual Compounded Rate							

Both truck and passenger vehicle crossings are expected to increase in the future. The following paragraph provides data on expected traffic growth to the year 2030.

Traffic Growth to the Year 2030: Based on long-term growth trends, truck and car crossings at the Blue Water Bridge are projected to increase between 2005 and 2030. Two separate commercial forecasts were developed based on existing and historical truck crossing data to estimate the possible future demand for cross-border traffic. The first forecast is based on growth patterns associated with a longer time period and anticipates cross-border commercial traffic to continue to grow at a rate similar to pre-9/11 levels. The annual number of trucks entering the United States at the bridge under this forecast is projected to increase by approximately 109 percent between 2005 and 2030. This represents an average annual increase of 4.4 percent per year. The number of trucks exiting to Canada is forecast to increase by approximately 100 percent between 2005 and 2030, an average annual increase of four percent per year. **Table 1.3** illustrates the truck traffic forecast for the Blue Water Bridge.

Table 1.3 Blue Water Bridge High Growth Truck Forecast

Year	Trucks		Average Daily Traffic		Annual Growth Rate***		
	Westbound into the U.S.A.	Eastbound into Canada	Westbound into the U.S.A.	Eastbound into Canada	Annual Growth Rate Period	Westbound into the U.S.A.*	Eastbound into Canada**
2005	920,530	870,160	2,522	2,384	-	-	-
2010	1,120,900	1,043,900	3,071	2,860	2005 to 2010	4.0%	3.7%
2020	1,521,700	1,521,700	4,169	3,812	2010 to 2020	3.1%	3.8%
2030	1,922,800	1,922,800	5,268	4,764	2020 to 2030	2.4%	2.4%
* Between 2005 and 2030 there is an average annual increase of 4.4% per year of trucks entering the United States at the bridge. ** Between 2005 and 2030 there is an average annual increase of 4.0% per year of trucks exiting to Canada. *** Annual Compounded Rate							

The second forecast, which represents a slowed-growth scenario, reflects the growth patterns associated with a much shorter period of time. For this lower growth estimate, the cross-border commercial patterns during the 2000-2005 time periods were used to project future commercial growth rates. In this slowed-growth projection, the annual number of trucks entering the United States at the bridge under this forecast is projected to increase by approximately 61 percent between 2005 and 2030. This represents an average annual increase of 2.4 percent per year. The number of trucks exiting to Canada is also forecast to increase by approximately 61 percent between 2005 and 2030, an average annual increase of 2.4 percent per year. **Table 1.4** illustrates the truck traffic forecast if current crossing trends were to be projected to 2030 for the Blue Water Bridge.

Under either of these commercial traffic growth trends, the existing plaza footprint does not provide adequate capacity for CBP or MDOT to carry out its daily operations. Not providing additional space for primary and secondary inspections will result in increased border delays for the aforementioned commercial volumes.

Table 1.4 Blue Water Bridge Low Growth Truck Forecast

Year	Trucks		Average Daily Traffic		Annual Growth Rate***		
	Westbound into the U.S.A.	Eastbound into Canada	Westbound into the U.S.A.	Eastbound into Canada	Annual Growth Rate Period	Westbound into the U.S.A.*	Eastbound into Canada**
2005	920,530	870,160	2,522	2,384	-	-	-
2010	1,033,315	974,550	2,831	2,670	2005 to 2010	2.3%	2.3%
2020	1,258,520	1,183,330	3,448	3,242	2010 to 2020	2.0%	2.0%
2030	1,484,090	1,392,110	4,066	3,814	2020 to 2030	1.7%	1.6%
* Between 2005 and 2030 there is an average annual increase of 2.4% per year of trucks entering the United States at the bridge.							
** Between 2005 and 2030 there is an average annual increase of 2.4% per year of trucks exiting to Canada.							
*** Annual Compounded Rate							

Total passenger traffic at the Blue Water Bridge is forecast to grow by approximately 21 percent between 2005 and 2030, an average annual increase of approximately 0.8 percent. **Table 1.5** illustrates the forecast passenger vehicle traffic growth. The recent decline in passenger vehicle crossings is unlikely to continue indefinitely. Normal population growth in Ontario and Michigan, along with greater acceptance of and adaptation to new border inspection procedures by travelers, is likely to halt the decline in passenger vehicle crossings over the next few years. This is reflected in the passenger car forecast which continues to decline until 2010 when the forecast begins to grow again. Improvements to the plaza and the I-94/I-69 corridor are expected to be sufficient to handle proposed traffic numbers at the build-out year of 2030.

Table 1.5 Blue Water Bridge Passenger Vehicle (Cars, Vans and Light Trucks) Forecast

Year	Passenger Vehicles		Average Daily Traffic		Annual Growth Rate***		
	Westbound into the U.S.A.	Eastbound into Canada	Westbound into the U.S.A.	Eastbound into Canada	Annual Growth Rate Period	Westbound into the U.S.A.*	Eastbound into Canada**
2005	1,866,300	1,841,600	5,110	5,068	-	-	-
2010	1,637,000	1,609,300	4,485	4,409	2005 to 2010	-2.6%	-2.7%
2020	1,951,700	1,914,800	5,347	5,246	2010 to 2020	1.8%	1.8%
2030	2,266,300	2,220,300	6,209	6,083	2020 to 2030	1.5%	1.5%
* Annual Compounded Rate							

Existing inspection and toll collection facilities on the plaza are inadequate to deal with this projected traffic growth. As discussed below, when all commercial primary inspection booths are staffed, significant truck queues occur even at present traffic volumes.

1.5.5 Backups Need to be Reduced

What Are Pre-notification Requirements?

Pre-notifications require traders shipping goods to the U.S. to submit certain cargo and conveyance information to the U.S. CBP before goods arrive at the border.

Improvements to the United States Plaza must minimize backups of commercial and passenger vehicles on both the Canadian and United States sides of the border. Some recent improvements have been made on the existing plaza to help reduce backups. These include conversion of inspection booths to allow use by cars and trucks, increased inspection staffing and an additional on-ramp lane to the plaza from I-94/I-69. CBP has implemented requirements for electronic pre-notification for truck shipments at the border which has also had some effect on border backups. These improvements will not address long-term backups resulting from potential new inspection procedures and/or traffic growth.

Fatal accidents due to vehicles rear-ending trucks during backups have occurred on both sides of the border. These backups interfere with local traffic using I-94/I-69 and often requiring traffic to stop quickly when reaching the end of the backup. Improvements to facilities on the Canadian side of the bridge are not part of this study. The BWBC has a plan for expansion of the Canadian plaza facilities to address their own long-term space needs as a result of the growth in cross-border traffic. Space for backed up traffic headed to Canada is limited on the United States Plaza. Changes in inspection procedures, including outbound inspections as discussed in **Section 1.5.1 New Inspection Technologies and Procedures Require More Space**, may lead to more frequent backups on I-94/I-69.

Table 1.6 Border Crossing Traffic Backup Frequency

Border Crossing	Type of Backup	Frequency of Occurrences
Westbound to USA	Passenger Vehicles	Mainly associated with holidays and summer weekends
	Commercial Vehicles	Once a week on heavy commercial days
	Highway 402	Averages twice a month
	Severe Weather/ Vehicle Incidents	Once or twice a year
	Number of 1 Hour or Greater Delays:	
	2005	Not Available
	2006	26
	2007	117
Eastbound to Canada	Passenger Vehicles	Associated with holidays, summer weekends, or Canadian work related slowdowns
	Severe Weather/ Vehicle Incidents	Once or twice a year
	Number of 1 Hour or Greater Delays:	
	2005	8
	2006	6
	2007	25

Backups of trucks and cars waiting to enter the United States, as illustrated in **Figure 1.3** and discussed in **Table 1.6**, are common at the Blue Water Bridge. Daylight hours on Tuesday, Wednesday and Thursday are the peak times for truck crossings. For security and operational reasons, traffic is held at the toll plaza on the Canadian side of the bridge when backups extend to the center of the bridge. As backups near the middle of the bridge, adequate sight distance for drivers who must stop to join the queue is a concern.



Figure 1.3 Truck Traffic Backups on the Blue Water Bridge



Figure 1.4 Truck Traffic Backup on Highway 402
Courtesy: Blue Water Bridge Canada

As illustrated in **Figure 1.4**, backups have extended three to five miles into Canada, nearly to the fourth interchange on the Canadian side of the bridge. Due to the implementation of pre-notification requirements such as FAST and NEXUS, three to five mile backups of trucks are now rare. The longest backups now occur for cars on holiday weekends. Although cars and trucks are instructed by signs to remain in certain lanes, these backups frequently create conflicts with Highway 402 traffic attempting to use interchanges near the Blue Water Bridge in Canada. This can require traffic to quickly adjust from freeway speeds to a complete stop. The backups are of substantial concern to Canadian authorities and local residents.

The backups of commercial and passenger vehicles into Canada are caused by the inadequacy of inspection facilities on the existing United States Plaza. These backups will likely worsen over time as the traffic utilizing the Blue Water Bridge increases if no improvements are made.

1.5.6 Reducing the Potential for Future Traffic Conflicts and Crashes

Plaza improvements must address a series of traffic weave movements and vehicle and pedestrian conflicts in order to enhance safety on the plaza and neighboring ramps and highways.

Traffic Weaves and Conflicts: A traffic weave is the movement of vehicles when traffic from one lane must cross in front of traffic in another lane (**Figure 1.5**). Weave movements should be avoided in congested situations where possible and

designed to the American Association of State Highway and Transportation Officials (AASHTO) standards. A weave becomes more difficult and unsafe with the addition of large numbers of trucks as seen at the Blue Water Bridge. The potential for crashes and conflicts will increase as the commercial truck traffic increases.

Weaves occur at four locations at or near the Blue Water Bridge: 1) crossing the westbound bridge, 2) between trucks leaving primary inspection and trucks leaving secondary inspection on the plaza, 3) cars and trucks exiting the plaza toward either the M-25 connector or I-94/I-69, and 4) Eastbound I-94/I-69 on the Black River Bridge and Water Street.

Two contributing factors are responsible for a weave movement on the westbound span of the Blue Water Bridge. The U.S. commercial secondary inspection area is located in the center of the plaza. Consequently, to avoid a severe weave on the plaza, primary inspection is placed on the left hand side for commercial vehicles and the right hand side for cars entering the United States. This alignment of inspection booths is in conflict with the general highway system in which trucks drive in the right hand lane. Commercial vehicles enter the Canadian plaza on the right hand side and drive through the toll booths with passenger vehicles on the left hand side. As a result of the placement of the United States inspection facilities, trucks must weave to the left most lanes to be inspected. The BWBC enacted an interim solution to deal with this undesirable weave and used a barrier wall to force all traffic west of the toll booths into one lane while exiting the Canadian toll plaza at slow speeds (this is considered a short-term fix). The barrier wall creates an undesirable situation for the Canadian toll booths, reducing their capacity and creating larger traffic queues along Highway 402.

Due to the location of commercial secondary inspection at the center of the U.S. plaza, a conflict also occurs between trucks leaving primary inspection and trucks leaving secondary inspection. Although vehicles are still traveling at relatively slow speeds, an undesirable situation occurs.

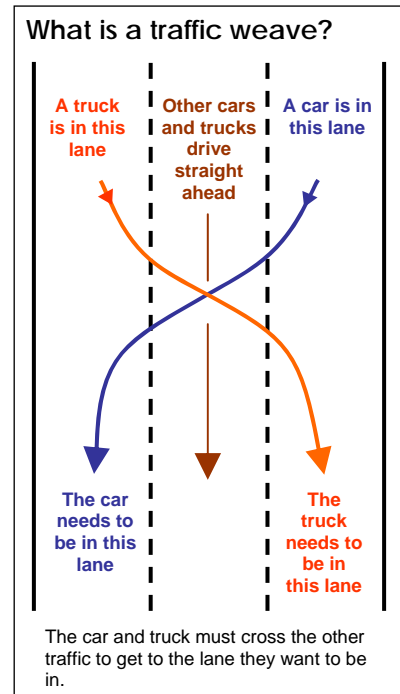


Figure 1.5

There also are pedestrian and vehicle conflicts on the plaza as inspection officers, MDOT staff, customs brokers and members of the public walk between primary and secondary inspection. Pedestrians are currently required to walk across the plaza through the flow of truck traffic, with no designated pedestrian crossings. MDOT spends approximately \$85,000 each year on staff to direct traffic on the plaza during high traffic periods.

Crash Potential: Current crash rates on the bridge are below statewide averages. This low accident rate is directly caused by the slow moving or congested traffic combined with a high presence of surveillance across the bridge resulting in drivers paying more attention and being more careful.

The potential for serious crashes remains a concern. Fatal crashes have occurred as a result of backups on both I-94/I-69 and Highway 402. Improvements to the U.S. plaza facility, including the removal of the mid-bridge weave will improve the flow of traffic and improve operations on the bridge.

1.5.7 Improvements to I-94/I-69 Infrastructure

I-94/I-69 corridor improvements will allow for much needed updates to aging infrastructure including the replacement of the existing I-94/I-69 bridge over the Black River. The bridge was built in 1950 and is in poor structural condition with substandard shoulders. Currently the Black River Bridge has a below average sufficiency rating which qualifies the bridge for replacement. With continued deteriorating bridge conditions and forecasted increases in traffic, the replacement and expansion of the bridge will provide a safer and more efficient roadway.



Black River Bridge

The Black River Bridge shoulder widths do not meet the latest freeway standards and if a vehicle breaks down on the bridge, there is no shoulder to move to, therefore a lane is blocked. Vehicles entering onto the eastbound freeway from Water Street conflict with the vehicles heading to Canada, which results in a weave that takes place on the bridge. The Canadian bound traffic will be barrier separated from the local eastbound lanes with the new structure, and thus removes the weave. Upgrading the existing Black River Bridge, including

the shoulders, would reduce the chance of a blocked lane and provide better conditions for avoiding back-up related rear-end collisions. Both deck conditions and the bridge structure need to be improved to meet current MDOT standards.

Both the Water Street Bridge over I-94/I-69 and the Lapeer connector overpass currently have deteriorating conditions that need to be addressed. The structure and deck of the Water Street Bridge (built in 1953) and the Lapeer connector overpass (built in 1964) will be replaced and the Water Street Bridge deck elevated. In doing so, the under-clearance will be increased to meet current MDOT standards. In order to provide better access to the I-94/I-69 freeway, the Water Street Bridge will be widened from two lanes with no shoulders or pedestrian facilities to two lanes with wide shoulders and pedestrian access on both sides of the bridge. This will also reduce congestion on Water Street as it is a major freeway access point from the city of Port Huron and Port Huron Township.

The DEIS included signalized intersections at Water Street that required ROW from adjacent properties, an expensive flared structure and did not provide adequate storage between the two signals during peak traffic times. Replacing signals with roundabouts minimized ROW impacts and improved traffic operations as shown in **Chapter 2, Tables 2.3.1 – 2.3.4**. The Water Street interchange and Lapeer connector improvements also are needed due to the widening of I-94/I-69 from four to eight lanes. These lane additions will improve safety and accommodate traffic growth in the corridor.

1.5.8 Improving Local Roads and Access to Port Huron

An additional goal of the project is to improve local access to and around the plaza. Downtown Port Huron and the St. Clair County riverfront are two locations that could be served by improved access to and from the plaza. The downtown area and the riverfront are important features that contribute to the vitality of the local community. Plaza improvements should also improve the access and visibility of the duty-free store affiliated with the plaza.

The existing plaza entrance and exit ramps are positioned to provide connections to and from I-94/I-69 but do not provide easy access to downtown Port Huron and the St. Clair riverfront. **Figure 1.2 in Chapter 1** of the **DEIS** illustrates the existing ramps between I-94/I-69, the plaza and local roads. Improving congested local roads around the existing plaza will also assist the city of Port Huron's economic development efforts.

The Duty Free store also lacks the visibility and access of similar stores at many other border plazas. It is located off of Hancock Street and Pine Grove Avenue, past the ramp from I-94/I-69 to the plaza. Many drivers miss the opportunity to shop due to its current location. At other crossings the Duty Free store is generally located in a more visible and accessible location, often past the toll plaza. The existing Duty Free store also has poor control of exiting cars and trucks, which allows patrons to potentially, illegally exit the facility without going to Canada as is required for purchasing Duty Free goods.

1.5.9 Maintenance

The existing Blue Water Bridge Plaza presents maintenance challenges. The exit ramps to I-94/I-69 and the M-25 connector are one-lane facilities. When the exit ramp to I-94/I-69 requires maintenance, traffic wishing to access the interstate must travel on a detour along local city roads. The plaza and United States side of the Blue Water Bridge are a part of the interstate system and significant maintenance requires detouring international interstate freeway traffic onto city streets. The crowded existing elevated plaza also presents challenges in terms of snow removal and storage during large snowfalls.



Existing Michigan Welcome Center

1.5.10 New Michigan Welcome Center

The Michigan Welcome Center is located on the north side of the Water Street interchange and is accessible from the westbound exit ramp from I-94/I-69. Currently, the welcome center is difficult to access, insufficient in size for the amount of visitors it receives, has inadequate parking and restrooms are separated from the main building.

A new welcome center is needed to better accommodate current and future border crossing traffic levels and provide a better gateway for international travelers entering Michigan and the United States. A Michigan State Police Motor Carrier Division truck inspection facility is proposed to be located within the welcome center. This facility will allow Michigan State Police to conduct routine inspections of inbound U.S. commercial vehicles, assuring compliance with all state and federal vehicle operating codes.

1.5.11 Improvements must be Flexible for the Future

Improvements to the United States Plaza must have flexibility for future and unknown inspection needs and must be able to be built in stages. Approximately \$103 million dollars in commercial goods cross the border at the Blue Water Bridge on an average day (2006, Bureau of Transportation Statistics). As the second busiest commercial border crossing between the United States and Canada, the Blue Water Bridge cannot completely shut down for plaza improvements without having a significant negative impact on trade between the two countries. The proposed project is to develop a 2030 plan of improvements, which can be implemented in phases as traffic grows and changes in technology and procedures occur.

1.5.12 State and Local Planning Support for Plaza Improvements

The Southeast Michigan Council of Governments (SEMCOG) 2030 Regional Transportation Plan includes engineering, right-of-way acquisition and construction of improvements to the border plaza at the Blue Water Bridge. All of these phases of improvements are currently included in the 2006-2010 timeframe for the Regional Transportation Plan.

1.5.13 On-going Canadian Plaza Improvements

The plaza facilities on the Canadian side are owned and operated by Blue Water Bridge Canada (BWBC), which reports to the government of Canada. As a result of international agreements, including the North American Free Trade Agreement (NAFTA), BWBC has stated that improvements to the U.S. Plaza should not have adverse

transboundary impacts on operations of BWBC or Highway 402 in Canada. Among the concerns of BWBC are fixing the westbound mid-bridge weave, minimizing traffic backups on Canadian facilities and accommodating future traffic growth, which are discussed in this document. BWBC is currently in the process of making \$110 million improvements to their plaza facilities over six projects.

1.6 Additional Justification Supporting the Project Need

1.6.1 CBP's Program of Requirements (POR)

Border operational policies and state of the art CBP inspection plaza design principles are ever evolving. Since September 2007, several changes have emerged that necessitate changes to the Blue Water Bridge plaza layout identified within the DEIS.

For all modern land port of entry facilities, CBP strives to achieve the following basic security design objectives:

- The public must be separated from active inspection areas
- All vehicles entering and exiting the plaza are subject to inspection
- The plaza design must account for vehicle control in order to ensure vehicles do not exit the plaza prior to completion of inspection
- No major roadways located underneath plaza inspection facilities or under plaza exit/entry ramps
- Conformity with the basic security standards contained within the Land Port of Entry design guide and
- The design must accommodate eight to ten-foot perimeter walls/fencing.

The proposed plaza expansion was designed in accordance with the United States Land Port of Entry Design Guide and CBP's Program of Requirements (POR). A POR, which is developed by CBP, outlines detailed infrastructure improvements specific to a given port of entry. The POR used to design the Blue Water Bridge Plaza Preferred Alternative referenced in the DEIS has since been modified by CBP. CBP submitted a revised POR for the Port Huron port of entry to

MDOT in June 2008. Changes to this latest POR were developed in response to public and agency comments on the DEIS, and to accommodate CBP's latest inspection technologies. These modifications, which are reflected in **Table 1.7**, have been incorporated into the Recommended Alternative plaza layout.

As part of the response to agency and local stakeholder comments on the DEIS, the Blue Water Bridge study design team coordinated with CBP, GSA and FHWA to identify opportunities to further minimize the overall impacts of the plaza expansion. The following section provides a narrative of the key CBP inspection facilities that are different than those identified within the DEIS. These changes are consistent with CBP's updated POR and have been incorporated into the Recommended Alternative described in more detail in **Chapter 2 Alternatives** in this FEIS.

Canada to U.S. Primary Inspection: Coming into the United States, the Primary Inspection Lanes (PILS), which are often referred to as primary inspection booths, are the first point of inspection for CBP officials. At this location both passenger and commercial vehicles undergo initial screenings by CBP officers.

The overall PILS layout was modified between the DEIS and this FEIS to include five lanes specifically designated for passenger traffic and 15 lanes that can be utilized for either trucks or cars. These 15 dual-use lanes can accommodate either inspection by CBP officers, depending upon the mix and demand of incoming U.S. border traffic. For example, on a holiday weekend, which experiences significantly more passenger traffic, up to 20 lanes could be dedicated to processing passenger traffic at any given time. Likewise, during peak commercial vehicle periods, up to 15 lanes could be utilized to process incoming truck traffic.

An additional change in the primary inspection area is the relocation of CBP's main administration building in relation to the primary inspection booths. Within the DEIS, the PILs were separated by CBP's main administration building. The current POR states that a single line of PILs is desirable to allow a

Table 1.7 DEIS to FEIS POR Comparison

Facility Area	DEIS	FEIS
Primary Inspection Lanes (PILs)		
Total Booths	20 expandable to 30	20 ability to expand to 30
Bus	1 lane	1 lane
Non-Commercial Booths	0	5 lanes
Commercial Booths	0	0
High-Lows Booths	20 lanes	15 lanes
Non-commercial Area		
Main Building	65,250 sq. ft.	20,307 sq. ft.
Head House	0	6,197 sq. ft.
Head House Garage	6 spaces	3 spaces
Inspection Parking	40 spaces	28 spaces
Commercial		
Building/Warehouse/Docks	43,000 sq.ft.	35,593 sq.ft.
Docks	12	20
Vehicle Parking Spaces	100	36
Non-Intrusive Inspection (NII)	3 permanent	2 permanent / 2 mobile
Hazmat Area	2 spaces	1 space
Trusted Traveler Center	0	1,722 sq. ft.
Office Building	100,000 sq.ft.	0
Outbound Inspection		
PILs	3 lanes	4 lanes
Building	6,000 sq. ft.	1,239 sq. ft.
Docks	5	2
Commercial Parking	15 spaces	0
NII	1 permanent	0
Enclosed Bay (Garage)	1 space	0
Hazmat Area	1 space	0
Kennel		
Dogs	15 kennels	0
Impound Lot		
Commercial	6 spaces	4 spaces
Cars	12 spaces	0
Other		
Staff Parking	582 spaces	168 spaces
Exit Control	Commercial section only	Commercial section and all vehicles exiting the plaza
CBP Space Requirements	57 acres	46 acres
Entire Plaza	65 acres	56 acres

clear line of sight from the administration building and the head house to all of CBP's Primary Inspection Booths.

Main Administration Building: The main administration building houses CBP's administrative staff and provides processing space for public processing activities. CBP's primary administration space on the plaza has reduced from a DEIS layout of 65,250 sq. ft. to a proposed FEIS layout of 20,307 sq. ft. This reduction of space in CBP's main administration building results from a revised analysis of future staffing needs and facility requirements, and addresses comments received on the DEIS.

A proposed 100,000 sq. ft. office building identified within the DEIS is no longer required. This facility originally included a CBP training facility and consolidated federal office space. These other federal offices are no longer being considered for relocation to the Port Huron port of entry, and certain aspects of training for Port Huron staff will continue to take place off site.

Federal Agency Employee and Visitor Parking: Staff parking spaces on this FEIS plaza layout reduced from 582 spaces identified in the DEIS to 168 spaces. This reduction in parking is due to a combination of the reduction of onsite office and facility needs, refinements made to the plaza configuration and CBP's efforts to minimize the impacts of the plaza on the greater Port Huron community.

Passenger Secondary Inspection: On the existing plaza, all non-commercial inspections occur under a canopy on the north side of the main building. This space is open and exposed to weather, there are no garages for more extensive inspections and there is no exit control. The main building lobby serves as the primary passenger processing area, which during peak periods becomes so crowded that customers are forced to wait outside.

A head house is proposed on the new plaza. The head house functions as administrative and processing support for the passenger secondary vehicle inspection area and operates as an observation area for the primary inspection booths. The DEIS did not call for a head house as the non-commercial

secondary inspection was located directly in front of the main building. This FEIS POR requires the head house and passenger secondary inspection to be located independent of the main administration building, directly in front of the Primary Inspection Booths. This new facility provides CBP officers with more efficient and safer access to conduct secondary inspection of passenger vehicles and provides CBP officers observation of all plaza operations.

Commercial Secondary Inspection: Commercial vehicles entering the United States are initially processed and either released at the primary inspection booth or directed to the Commercial Secondary Inspection area. Trucks sent to the secondary inspection area may be directed to a set of secondary radiation monitoring portals or they will be sent for Non-Intrusive Inspection (NII). Space for the secondary radiation detection portals is a new requirement for this FEIS plaza layout. From this location within the plaza trucks may be released, sent to the processing area for additional Customs processing paperwork, or sent directly to the commercial inspection loading docks for further inspection.

Secondary unloading docks are used to completely unload trucks and perform a detailed inspection of the vehicle if concerns are identified by CBP officers anywhere within the inspection process. The number of loading docks increased from 12-docks to 20-docks and the number of truck parking spaces decreased from 100 spaces within the DEIS to 36 spaces in this FEIS.

This reduction in parking space is due to more efficient secondary processing procedures including a requirement that carriers must have pre-completed paperwork prior to arriving at the U.S. port of entry. The additional unloading docks also reduce the need for parking spaces.

Also within the commercial secondary inspection area, the number of NIIs increased from 3 permanent to 4 (2 permanent and 2 mobile NIIs). This increase reflects CBP's desire to increase the number of trucks that ultimately will be required to be inspected using NII technology.

Exit Control: Exit control is used to prevent vehicles from leaving the plaza without clearance. For instance, if a truck is referred to secondary inspection from primary, it will be blocked at the exit control and redirected to secondary. The DEIS called for exit control from Commercial Secondary Inspection only with no exit control for vehicles exiting primary inspection. An exit control option was added to this FEIS plaza layout.

Outbound U.S. Traffic to Canada: Outbound inspections completed by CBP officers have been increased since the terrorist attacks of September 11, 2001. Presently on the Blue Water Bridge Plaza, all outbound inspections are performed on a random basis in a temporary area beyond the MDOT toll collection booths. The DEIS called for outbound inspection facilities that resembled a small port that occupied approximately 8 acres of land. It was envisioned that the DEIS outbound inspection facilities would be utilized to inspect a large number of vehicles leaving the United States. The revised POR called for a much smaller facility that would operate on a more random basis and utilize some of the inbound facilities such as NII.

Outbound inspection facilities were modified in this FEIS POR with 4-PILS compared to 3-PILS, a 1,239 sq. ft. building compared to a 6,000 sq. ft. building and a reduction of docks from five docks to two docks. As with other space reductions on the proposed Recommended Alternative plaza layout, the reductions to the outbound inspection facilities were made in response to comments received on the DEIS and an evolving CBP policy regarding the operational needs of the outbound inspection area.

The revised POR requires inbound exit control following both primary and secondary inspection. This is to prevent vehicles referred from primary to secondary inspection from making their way off the plaza without further inspection.

Other Federal, State and Stakeholder Plaza Facility Changes: In addition to the aforementioned CBP facilities, changes to facilities utilized by other federal and state agencies and Customs Brokers currently operating on the plaza, have been

incorporated into this FEIS plaza layout. These changes include:

- United States Department of Agriculture: An observation deck was added to the Commercial Secondary Inspection area. At this elevated observation deck, the USDA will conduct visual animal inspections. No unloading of animals for inspection is proposed at the plaza.
- Michigan State Police (MSP): An observation area for MSP Motor Carrier operations has been added to the plaza footprint. A paved parking area will be added downstream of CBP's operations to accommodate necessary MSP Motor Carrier inspection of inbound trucks. There will be a kiosk for a phone connection for brokers.
- Custom Brokers: In an effort to reduce the overall size of the plaza, space for Custom Brokers will not be accommodated on the plaza. All future Custom Brokers' operations will occur off-site.

The facility needs to accommodate MDOT's necessary Toll Administration and Blue Water Bridge maintenance operations on the plaza have not changed since the DEIS.

1.6.2 CBP Border Operational Policies and Assumptions

The U.S. Customs and Border Protection's mission is to provide safe, efficient and secure movement of people and goods across the border and to support the mobility and security associated with needs of national and civil defense. CBP requires adequate facilities to perform this mission, especially at large ports of entry like Port Huron. As stated previously, the current Blue Water Bridge Plaza facility has significant deficiencies that limit CBP's effective operations.

Several DEIS comments requested more information on CBP vehicle processing times, CBP staffing levels and other data that the commenter thought might affect plaza size and need. For national security reasons, CBP does not release its staffing data or vehicle processing time data. However, CBP officials have stated numerous times that the agency will take care throughout this NEPA process and the resulting DEIS and FEIS, to make information for NEPA analysis and documents available to the public in conformance with its responsibilities

under the Council on Environmental Quality (CEQ) regulations at 40 CFR 1506.6(f). In accordance with CEQ regulations, the Department of Homeland Security (DHS) will not disclose classified, sensitive security information or other information that DHS otherwise would not disclose pursuant to the Freedom of Information Act (FOIA) (5 U.S.C. 552).

The Blue Water Bridge Plaza Study Team has developed the Recommended Alternative described within **Chapter 2** in accordance with CBP's mission, the U.S. Land Port of Entry Design Guide, the aforementioned Program of Requirements and with extensive input from local and national CBP staff.

1.6.3 Traffic Projection Analysis and Assumptions

The traffic projection analysis is discussed in depth in the traffic report and a summary of traffic changes in **Section 1.5.4**. The items discussed in this section address public comments from the DEIS and how the answers to the questions affect the Recommended Alternative. Refer to **Chapter 7** for a full list of comments and responses.

While supporting the need to “enhance security and accommodate new security-related technologies” several commenters concluded that the DEIS did not provide enough information about how the projected traffic volumes related to the proposed plaza size. In particular, their concern was based upon comparison to traffic volumes for the proposed Peace Bridge.

Security enhancements and safety concerns are key aspects of the Blue Water Bridge Plaza improvements. Each plaza alternative was designed to accommodate traffic volumes within the acceptable level of delay stated by CBP. Furthermore, simply comparing traffic volumes at different ports of entry is not a stand-alone measure for plaza inspection facility sizing. To assure a port of entry inspection area is properly sized, one must also account for the type of traffic (i.e., passenger traffic vs. commercial traffic) flowing through the port, the existing security features already installed at the port, the existing configuration of the port of entry and other agencies or activities which must be accommodated at the port of entry.

There are also many operational design requirements that affect the layout of the plaza and its corresponding size, these include:

- Maintaining clear sight lines and visibility for CBP officers between facilities
- Assuring there is efficient emergency response/access to all points by CBP
- Providing turning radii and maneuvering room for large tractor trailer and commercial vehicles
- Maintaining secure separation of facilities, including inbound and outbound traffic, primary and secondary inspection, outbound inspection, Duty Free and vehicle impoundment
- Providing space for a construction staging area to enable grade changes that will bring traffic to lower elevations while maintaining operable traffic flow and inspections
- Allowing for the construction of temporary facilities to maintain traffic flow and security through multiple phases of construction
- Providing open area for detention of stormwater and temporary snow storage.

A number of DEIS commenters suggested reducing truck traffic, (in the event Canadian trash trucks were prohibited from crossing or directing truck traffic to a different point of entry), would eliminate the need for an expanded plaza.

Truckers make decisions regarding the use of border crossing locations based upon many factors, not the least of which is proximity to their destination and travel time. The nearest alternate commercial border crossing is located in Detroit. This location also resides within a developed commercial area, processes even more commercial freight than does the Blue Water Bridge Plaza and was recently expanded. The Michigan Department of Transportation is also studying the addition of another land port crossing of the Detroit River. This is illustrative of the growing importance of international commerce to the state and nation, as well as local industry and employment.

The Canadian trash trucks crossing at the Blue Water Bridge account for approximately 3 percent of the commercial traffic

crossing the bridge. While there continues to be political debate on the value and impact of this use, the vehicles themselves are small in size by comparison to a commercial tractor trailer and their elimination would have little effect on the plaza operations and no effect on the plaza size or need.

After reviewing all of the aforementioned criteria and project needs, CBP/GSA, FHWA and MDOT determined the Recommended Alternative plaza layout could be reduced to 56 acres from 65 acres based on the latest POR and inspection requirements needed to process 2030 traffic.

CHAPTER 2

ALTERNATIVES

This chapter provides an overview of the alternatives still under consideration. Four alternatives were carried forward in the DEIS. Two of these alternatives, the No-Build and a modification of the DEIS Preferred Alternative/City West Alternative, are still under consideration and are discussed in this chapter.

A full discussion of all Illustrative and Practical Alternatives and the reasons why they have been eliminated from further consideration can be found in **Chapter 2** of the **DEIS**. None of the cooperating agency, local stakeholder or public comments received during the DEIS comment period changed why the other alternatives considered in the DEIS could not be carried forward as the Recommended Alternative.

The two alternatives presented in this FEIS are:

- The No-Build Alternative, which involves no expansion of the existing plaza or the I-94/I-69 corridor, and
- The Recommended Alternative, which incorporates design modifications from the DEIS City West (Preferred) Alternative.

The Recommended Alternative expands the plaza in the city of Port Huron, relocates Pine Grove Avenue to the west, and makes improvements along the I-94/I-69 corridor. The Recommended Alternative was developed following comments received on the DEIS Preferred Alternative. The Recommended Alternative best addresses the reasons for improving the plaza/corridor when compared with all other potential alternatives. The No-Build Alternative is considered the baseline condition for which the Recommended Alternative is compared against.

2.1 No-Build Alternative Summary

The No-Build Alternative is considered the baseline condition for comparison to the Recommended Alternative. See **Chapter 2** of the **DEIS** for a full discussion of the effects of the No-Build Alternative.

What is a No-Build Alternative?

A No-Build Alternative is considered the baseline condition for comparing the other alternatives.

What is a Recommended Alternative?

The alternative that has been identified as best meeting the purpose and need for the project while minimizing social, environmental and economic impacts.

MDOT and CBP would continue to maintain the existing plaza facilities. The existing welcome center will remain in its current location.

The No-Build Alternative would include continued maintenance and technology improvements as space allows, over the next 25 years. Accommodation of all required facilities for CBP would not be possible on the existing plaza and substantial gridlock would likely occur on the plaza as new facilities are introduced and the limited existing parking and queuing space is reduced. There would be no expansion of the existing plaza footprint.

Plaza Operations Entering the U.S.: The No-Build Alternative would not make any changes to the existing plaza configuration or the Blue Water Bridge. A delay analysis completed in September 2008, shows the current average crossing delays for both cars and commercial vehicles is 26 minutes. This delay results in car back-ups of 0.6 mile and truck back-ups to 1.3 miles. The existing plaza operations and lack of space to conduct current CBP processing requirements efficiently sometimes produce larger queues and lengthy delays (one to two hours). The delay analysis summary can be found in **Section 2.3**.

Future conditions at the plaza would worsen under the No-Build Alternative. According to the delay analysis future average crossing delays in 2030 would deteriorate to an average car delay of 32 minutes, resulting in a 1.7 mile back-up for passenger vehicles. Commercial vehicles in the future would experience an average of 23.7 minutes of delay and queues would extend 1.8 miles under the No-Build Alternative. Further discussion of this delay study is presented in **Section 2.3** of this chapter.



Truck Traffic Backup on Highway 402
Courtesy: Blue Water Bridge Canada

Plaza Operations Leaving the U.S.: Anticipated traffic growth would cause travelers to experience more severe delays and much larger queues into Canada and on the I-94/I-69 freeway. The steady increase in traffic would gradually increase the delays and queues at the plaza. The outbound plaza traffic queue is the spot that would trigger backups that would affect the entire I-94/I-69 corridor.

The high congestion and queues at the outbound plaza would extend onto I-94/I-69 lanes on a more regular basis. Eventually, this queue would reach the eastbound Water Street on-ramp, which would already be experiencing high congestion. Local traffic wishing to travel north on the M-25 connector would then be required to merge with stopped vehicles on the freeway. As a result, the backup would continue to grow until the entire roadway network is at a standstill.

Local Roads: Projected 2030 traffic volumes indicate that the current problems on the local roadways and intersections would worsen. This would result in long queues and delays at several intersections. The intersections identified to be at risk for high congestion (greater than 55 seconds delay) are the Hancock Street and M-25 connector intersection, the Hancock Street and Pine Grove Avenue intersection, the Pine Grove Avenue and 10th Avenue intersection, and the Water Street interchange.

I-94/I-69 Freeway: The No-Build Alternative would not include any improvements to the Black River Bridge or the I-94/I-69 corridor. An MDOT report on the condition of the bridge states that the deck surface has approximately 30 percent surface deficiency. This will require that the bridge deck be replaced within the next five years. Traffic operations with a bridge deck replacement would not change, meaning the existing eastbound traffic weave which occurs on the Black River Bridge would remain.

All freeway ramps would experience low (less than 48% of capacity) or moderate levels (48% to 88% of capacity) of congestion without factoring potential delay caused by traffic backups onto the I-94/I-69 freeway from the existing plaza.



**Under the No-Build Alternative,
The frequency of traffic
backups along I-94/I-69 would
continue to worsen.**

No improvements to the current utility services are anticipated for the No-Build Alternative.

2.2 Process Followed to Develop Modifications to the DEIS Preferred Alternative

This section discusses the changes made to the Preferred Alternative following the issuance of the DEIS in September 2007. Comments received on both the DEIS and the Preferred Alternative indicated that the size of the proposed plaza was a concern for many in the local community. As a result, the plaza requirements and the overall size were re-analyzed by FHWA, MDOT, CBP and GSA. The resulting modifications have been incorporated into the Recommended Alternative, which is discussed in detail in **Section 2.3**.

DEIS Preferred Alternative: As illustrated in **Figure 2.2.1**, the DEIS identified the City West Alternative as the Preferred Alternative. **Chapter 2** of the **DEIS**, describes the proposed size of the plaza expansion as 65 acres.

The DEIS Preferred Alternative plaza size requirement was determined by the facility needs required by CBP as part of their Program of Requirements (POR). The size of Port Huron's Port of Entry (POE) was originally required by CBP to be between 60-80 acres to accommodate their required operations and security measures. This is what determined the size of the plaza presented in the DEIS.

From December 2007 thru June 2008, a series of meetings were held with CBP and GSA. Representatives from CBP's Local Port, Field Operations, and Facility and Asset Management offices were consulted. MDOT and Federal Highway Administration (FHWA) staff also participated in these meetings. The purpose of the meetings was to confirm the POR requirements and seek ways to minimize the impacts of a future plaza expansion. Every space requirement of the Preferred Alternative was scrutinized to determine if a reduction of the overall plaza size was possible.

The Study Team prepared a number of revised plaza layouts in an attempt to decrease plaza size while maintaining optimal vehicle circulation, required facilities based on the POR, and

necessary security requirements. All future plaza configurations were also evaluated to make sure they could be

City West Alternative Features **(DEIS Preferred Alternative)**

- Plaza down to grade/Pine Grove Avenue relocated
- Plaza Footprint ~ approx. 65 acres
- 20 Inspection Lanes (expandable to 30)
- Expanded secondary inspection facilities include:
 - o 12 docks
 - o 3 GRIT
 - o 100 parking spaces for trucks
- Expanded outbound inspection
- Expanded CBP/MDOT office space
- Relocated Duty Free
- Direct access to Port Huron/Fort Gratiot Township

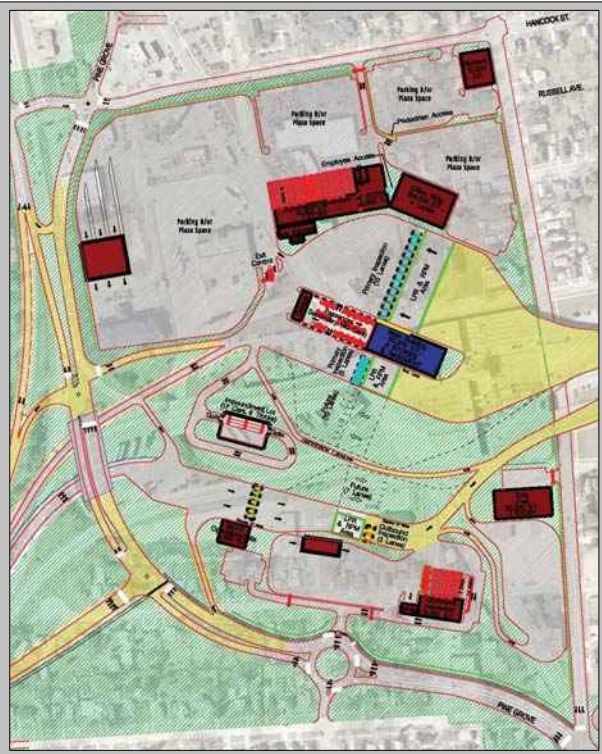


Figure 2.2.1 The City West Alternative Features

constructed while still maintaining all existing plaza operations and critical north/south local access. CBP in turn revisited all aspects of their POR and reduced requirements where possible. Each revised layout was reviewed in detail by CBP and GSA with comments then provided to the Study Team. Revisions were made to the layout and presented back to CBP for consideration. During this iterative and collaborative process, several CBP operational changes were incorporated into the plaza layout such as the location of the hazardous material containment area and the location of the non-commercial secondary inspection facility. The focus was to obtain a reduced POR that would allow for a reduction in plaza size without jeopardizing CBP's ability to carry out their existing and future mission at the border.

In June 2008, MDOT released a draft Recommended Alternative. This draft Recommended Alternative is illustrated in **Figure 2.2.2**.



Figure 2.2.2 The Draft Recommended Alternative as released in June 2008

Specific changes of the draft Recommended Alternative included:

- Overall size of permanent CBP/MDOT plaza facilities was reduced from 65 to 56 acres.
- Reduction of permanent right-of-way impacts within the city of Port Huron to the greatest extent possible bringing the total relocations down to 125 residences and 30 businesses.
- CBP space on the plaza was reduced from 57 acres to 46 acres.
- CBP was able to reduce the number of truck parking spaces on the new plaza from 100 to 36.
- 100,000 sq. ft. of office space was removed from the plaza.

- CBP's proposed outbound inspection facilities were greatly reduced.
- Customs broker's offices were removed from the proposed plaza.
- Another modification to the plaza was a more efficient design of the duty free store parking area, which provides a better vehicle flow for entering and exiting traffic.

The draft Recommended Alternative was released to the public June 12, 2008 utilizing local media sources and MDOT's project web-site. The alternative was presented at a June 12, 2008 joint city of Port Huron Council/St. Clair County Board of Commissioner/Port Huron Township Board meeting. Comments on the alternative were also received at MDOT's office in Port Huron during office hours held every first and third Friday of the month

Additional comments and concerns conveyed to the Study Team focused on the properties located south of the proposed plaza that were no longer necessary relocations as part of the revised plaza. These concerns focused on future quality of life for these remaining properties due to their proximity to the new plaza and the new relocated Pine Grove Avenue. See **Figure 2.2.3.**

After further analysis, the Blue Water Bridge Study Team determined these remaining properties, if left to remain in their current location would be:

- **Segregated** from other existing land uses and would result in the creation of its own defined area;
- **Separated** from adjacent properties and would result in the creation of a non-complimentary mixed land use; and
- **Isolated** from other residences and business in an area that becomes difficult to accommodate both vehicular and pedestrian movements.

Additionally, the areas south of the plaza and relocated Pine Grove Avenue will be utilized for maintenance of traffic and construction staging purposes during the construction phases. This area may also be utilized for stormwater detention areas. A decision of whether this property will be utilized for

stormwater drainage purposes will be made during the design phase of the project.



Figure 2.2.3 Pine Grove Relocations and Scott Avenue Properties

2.3 Description of the Recommended Alternative

What is a Recommended Alternative?

It is the alternative that has been identified as best meeting the purpose and need for the project while minimizing social, environmental and economic impacts.

This section describes the Recommended Alternative. Based on comments received on the DEIS (shown in **Chapter 7**), revisions to the City West (Preferred) Alternative were made to address the plaza size and layout, and reduce the social, economic, and environmental impacts. The resulting alternative is the Recommended Alternative.

Since the release of the DEIS, modifications were made to the Preferred Alternative. These changes, which are reflected in the Recommended Alternative, will be discussed in detail in

this chapter. The Study Team identified the Recommended Alternative after a long consultative process that included discussions with the cooperating agencies for the project, meetings with local officials and multiple public meetings. For a full discussion of the process followed to develop the Illustrative, Practical and Preferred Alternatives refer to **Chapter 2** of the DEIS.

2.3.1 Key Reasons Why the Refined Preferred Alternative is the Recommended Alternative

The Recommended Alternative best addresses the reasons for plaza improvements and has specific advantages over the other alternatives with regards to security and community impacts for the plaza improvements.

Safety & Security: The Recommended Alternative meets all safety and security requirements of an international border crossing.

- The Recommended Alternative eliminates a major roadway running (Pine Grove Avenue) underneath the inspection area.
- All major roadway crossings are located west of the primary and secondary inspection points on the plaza. This enhances the security of the facility and reduces the vulnerabilities of the plaza to a terrorist incident that could shut the border crossing down for a long period of time.
- The Recommended Alternative layout minimizes the ability of border runners to cross through the plaza without being inspected.

Accommodates CBP Technologies: The Recommended Alternative includes all of the inspection facilities required by CBP as well as space for additional facilities which future traffic conditions and new technologies may require.

- The Recommended Alternative features a facility layout that is preferred by CBP and GSA based on the Program of Requirements (POR) discussed in **Chapter 1** of this FEIS.



Truck Inspection Booths



Radiation Detection Portals

- The Recommended Alternative provides CBP with the space and flexibility to implement both current and future technologies.

Improved Flow of Traffic: The Recommended Alternative best improves current and future traffic issues on the local roads surrounding the plaza.

- The Recommended Alternative improves upon the current geometric and operational deficiencies at the Pine Grove Avenue and 10th Avenue intersection. By modifying the 10th Avenue intersection from a six-legged intersection to a four-leg the number of potential vehicle conflict points will be dramatically decreased. A vehicle conflict point is any location where a vehicle needs to cross the path of another vehicle in the intersection. For instance a left turning vehicle needs to cross the path of an on-coming through vehicle to complete the movement.
- The intersection of Pine Grove Avenue and M-25 connector north of the plaza is eliminated, and now located south at the relocated Pine Grove Avenue.
- The Recommended Alternative is projected to reduce future congestion at the Hancock Street and M-25 connector intersection.

Local Access Enhancements: The Recommended Alternative will provide local access enhancements both from the plaza and from the I-94/I-69 corridor.

- The Recommended Alternative will provide direct access from the plaza to local destinations north and south of the plaza. This is a substantial improvement over the indirect access provided by the No-Build Alternative and the other build alternatives discussed in the DEIS.
- The Recommended Alternative provides both east and west access to the I-94/I-69 corridor at a redesigned full access Lapeer connector interchange.
- The Recommended Alternative also provides better north-south local access around the new plaza than other

alternatives. 10th Avenue would continue to provide north-south access on the east and the relocated Pine Grove Avenue would provide north-south access to the west.

Emergency Response: Emergency access to neighborhoods surrounding the plaza will be maintained with the Recommended Alternative.

- Emergency responders will still have two choices for north south access around the plaza with the Recommended Alternative. Emergency responders can utilize either 10th Avenue or the relocated Pine Grove Avenue as a north-south alternate route if one or the other became blocked by a traffic accident or other incident. Emergency access to the plaza would be through gated access from local streets.

Gateway Effect: The Recommended Alternative would provide a superior visual entrance to the city of Port Huron and the Port Huron area when compared to the No-Build Alternative.

- The Pine Grove Avenue boulevard design with direct access to either northbound or southbound Pine Grove Avenue will increase both visibility and access to the city of Port Huron. Opportunities to incorporate enhanced landscaping and signage are much greater under this alternative compared to other alternatives evaluated.

2.3.2 Describe the Recommended Alternative

The Recommended Alternative, as illustrated in **Figure 2.3.1**, expands the existing plaza within the city of Port Huron and brings most of the elevated plaza down to street level. This alternative meets all plaza operational and traffic circulation needs through the year 2030. The permanent plaza area (CBP and MDOT operations occupied space) of the Recommended Alternative has been reduced in size since the release of the DEIS from 65 acres to 56 acres. CBP space has been reduced from 57 acres to 46 acres.

The Recommended Alternative still requires the relocation of Pine Grove Avenue to the west between 10th Avenue and Riverview Street. Relocated Pine Grove Avenue would wrap



The Blue Water Bridge

around the south and west sides of the new plaza then split into separate northbound and southbound lanes near the Hancock Street/M-25 connector intersection. The northbound lanes would turn back east and connect to the existing Pine Grove Avenue at approximately Riverview Street. The southbound lanes would follow the existing M-25 connector.

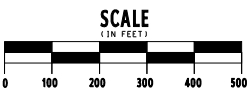
The following description of the Recommended Alternative includes all of the changes made to the inspection facilities since the DEIS and the release of the preliminary Recommended Alternative in June 2008:

The Plaza: The Recommended Alternative requires commercial vehicles crossing the Blue Water Bridge to remain in the right lane and passenger vehicles in the left lanes. Traffic entering the United States from Canada (see blue circle in **Figure 2.3.2**) will come off the Blue Water Bridge and come down to street level. By the time cars and trucks reach the primary inspection booths on the plaza, they are at street level.

Primary Inspection: All vehicles entering the United States are required to pass through primary inspection. See **Figure 2.3.2**. The Recommended Alternative provides 20 primary inspection booths for cars and trucks arriving from Canada. 15 of these booths will be able to accommodate both cars and trucks. Before the cars and trucks reach the inspection booths, they pass through radiation detection portals, which ensure that they are not bringing radioactive material into the United

Recommended Alternative

Blue Water Bridge Plaza Study



LEGEND	
	Rising or Elevated Sections
	At Grade
	Impacted Parcels



Figure 2.3.1 Recommended Alternative

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States. At the inspection booths, drivers and passengers answer questions from CBP officers and discuss or provide paperwork for the cargo they are carrying.

If cars and trucks clear primary inspection, they would have two options to exit the plaza (as shown by the black arrow in **Figure 2.3.3**). They could take a ramp to I-94/I-69 headed west or a ramp to connect to the relocated Pine Grove Avenue at a signalized intersection. Freeway exits from the plaza would be similar to those for the existing plaza. Vehicles exiting the plaza would have to show proof that they are cleared to leave the plaza at an additional exit control booth.

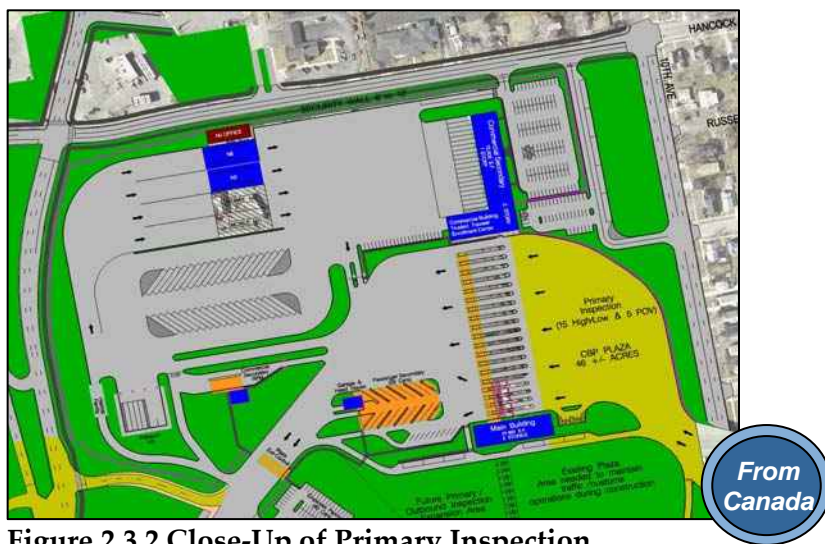


Figure 2.3.2 Close-Up of Primary Inspection

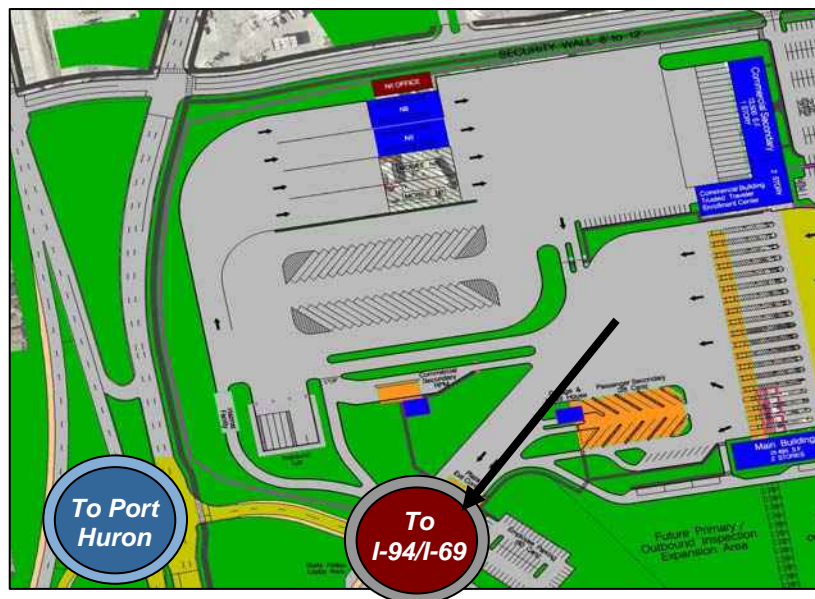


Figure 2.3.3 Primary Inspection Exit

Secondary Inspection (Commercial): Trucks not cleared at the primary inspection booths are sent to the secondary truck inspection area, as shown in **Figure 2.3.4**. As illustrated by the dashed line, the Recommended Alternative uses the block bordered by Hancock Street, 10th Avenue, the existing plaza, and the existing M-25 connector for the expanded secondary truck inspection area.



Figure 2.3.4 Close-Up of Secondary Inspection

The truck secondary inspection area contains 36 truck parking spaces to accommodate trucks sent to secondary inspection for document processing. Twenty docks for unloading trucks, and 35,600 square feet of office and unloading space are also included in this area.

The truck inspection area will include a special dock for livestock inspection that allows inspection officers to walk around the trailer on an elevated platform to view into a livestock trailer. No unloading of animals would occur on the plaza.

Up to four Non-Intrusive Inspection (NII) units will be utilized, which allow CBP officers to electronically scan the contents of vehicles.

Secondary Inspection (Passenger Vehicles): Cars with passengers that are not cleared to enter the United States or require further processing are sent to the secondary inspection area. The passenger secondary inspection area is located just downstream of the Primary Inspection Booths. The secondary inspection area for passenger vehicles includes space to inspect 28 cars and includes a head house building shown in dark blue on **Figure 2.3.5**. This building also would contain enclosed inspection garages and additional space for CBP officers to conduct border processing paperwork. There is also a parking area for cars that require further inspection.

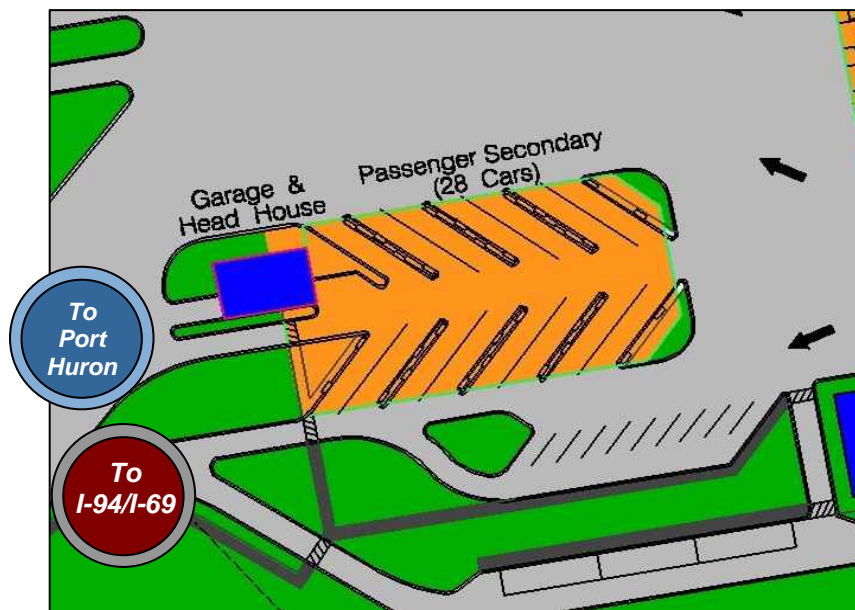


Figure 2.3.5 Head House Building of Secondary Inspection

Local Access: Local and international traffic that has cleared customs has easy access to both the city of Port Huron and Fort Gratiot. For visitors wishing to visit the city, a left hand turn at the signalized intersection will provide direct access to southbound Pine Grove Avenue. For those interested in visiting Fort Gratiot and points north, a right hand turn at the signalized intersection will provide direct northern access to northern St. Clair County and the thumb region of Michigan.

Leaving the U.S. to Canada: As shown by the black lines in **Figure 2.3.6**, cars and trucks traveling to Canada will have two entrances to the plaza. One is off of I-94/I-69 and the other is a ramp from the relocated Pine Grove Avenue. Facilities will be provided to allow CBP to inspect cars and trucks leaving the

What is Outbound Inspection?

Outbound inspection booths and facilities allow CBP to enforce export control legislation and inspect certain individuals leaving the country. Currently CBP conducts random exit control interviews by flagging down outbound vehicles after they pass through the toll booths.

United States. This area is called outbound inspection. Eight toll lanes will precede outbound inspection facilities. Following the toll lanes, cars and trucks pass through the outbound inspection facilities which include four booths, two docks for unloading trucks, and adequate truck and car parking spaces.

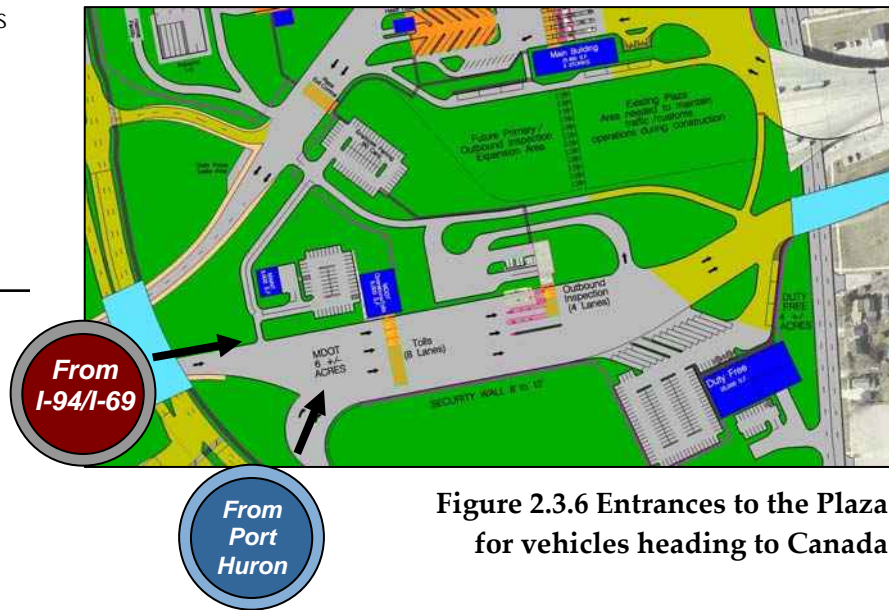


Figure 2.3.6 Entrances to the Plaza for vehicles heading to Canada

A new duty free store and parking would occupy approximately four acres and could only be accessed by drivers who have already cleared outbound inspection and the toll booths. Following the duty free store, all vehicles would take the bridge to Canada.

The plaza will also include parking for both MDOT and CBP plaza employees and visitors. The majority of CBP employee and visitor parking will be located in the northeast corner of the plaza. The proposed plaza will include separate secure lots for employees and visitors.

The existing plaza area will remain open throughout construction in order to maintain traffic and plaza operations. The border cannot be shut down during construction and must remain open at all times. Once the new plaza is open to new traffic, the existing plaza will be demolished and brought down to the level of the new plaza. This space will be used to accommodate future CBP primary inspection booth expansion.

Improvements to the I-94/I-69 corridor: The Recommended Alternative includes replacement and expansion of the Black River Bridge, the Water Street interchange and the Lapeer connector interchange. It also includes additional lanes on I-94/I-69, separation of eastbound border crossing traffic from local traffic, and a new Michigan Welcome Center in Port Huron Township.

Black River Bridge: The Recommended Alternative includes an expansion and replacement of the I-94/I-69 bridge over the Black River. The existing bridge is approximately 64-feet wide and has four travel lanes, two for eastbound traffic and two for westbound traffic along with narrow shoulders.

Figure 2.3.7 shows the proposed lane configuration on the Black River Bridge. The new bridge will be approximately 200 feet wide and will consist of 12 spans. The new bridge will have nine travel lanes, three lanes for eastbound local traffic, three lanes for eastbound international traffic heading to Canada and three lanes for combined border crossing and local westbound traffic. The designated lanes for eastbound border crossing traffic will be barrier separated from the lanes for local traffic.

To reduce the potential for conflicts between border crossing traffic waiting to be inspected and local traffic, separate lanes for eastbound border and local traffic are provided between the Lapeer connector interchange and the plaza. The eastbound border crossing lanes will include one lane for cars, one lane for trucks, and one lane for vehicles enrolled in the FAST and NEXUS program. The eastbound local M-25 connector traffic lanes will include three lanes connecting to relocated Pine Grove Avenue. At the intersection of the local lanes and relocated Pine Grove Avenue, traffic may turn left for northern destinations such as Fort Gratiot and northern St. Clair County, or right to access downtown Port Huron.

The new bridge will include 12-foot shoulders for emergency access/vehicle storage, an upgrade over the two foot shoulders on the existing bridge. The bridge will also have a 14-foot dual-direction non-motorized path. This path will be located on the south side of the bridge and will connect with the existing sidewalks along Water Street and the newly



Figure 2.3.7 Recommended Alternative Lanes on the Black River Bridge

constructed non-motorized facilities along relocated Pine Grove Avenue.

I-94/I-69 Freeway Improvements: The Recommended Alternative includes resurfacing and expansion of 2.5 miles of existing I-94/I-69 as shown in **Figure 2.3.8** on the following page. Much of the expansion includes an extension of the eastbound M-25 connector between the ramps to the existing plaza and the Lapeer connector. This will allow for the separation of local traffic from eastbound traffic crossing the border. Access from I-94/I-69 will be provided to the Water Street and the Lapeer connector interchanges.

Water Street Interchange: The Recommended Alternative includes the replacement of the existing interchange at Water Street including the Water Street Bridge over I-94/I-69. As illustrated in **Figure 2.3.9**, the replacement bridge will be two lanes wide, with one travel lane in each direction. Roundabouts are proposed for each end of the bridge at the freeway ramp intersections. The bridge will also accommodate pedestrian traffic by including one 10-foot sidewalk on the east side of the bridge.

Access along Water Street for existing businesses will remain unchanged for the following businesses/land uses: Cracker Barrel, Bridgewater Marina, Bob Evans, Speedway and the Girl Scouts Building. Access to Township Park 1 will be modified slightly. (see **Chapter 4.0** for further details).

For the visually impaired, a signalized pedestrian crossing could possibly be provided. The crossing would provide a signal to stop traffic on demand for pedestrians by pushing a crossing button which would activate the signal. Another option could be to provide a down-stream pedestrian crossing.

The exact configuration of the intersections and pedestrian crossing will be determined during the design phase of the project. The amps to Water Street will be upgraded to current design standards.

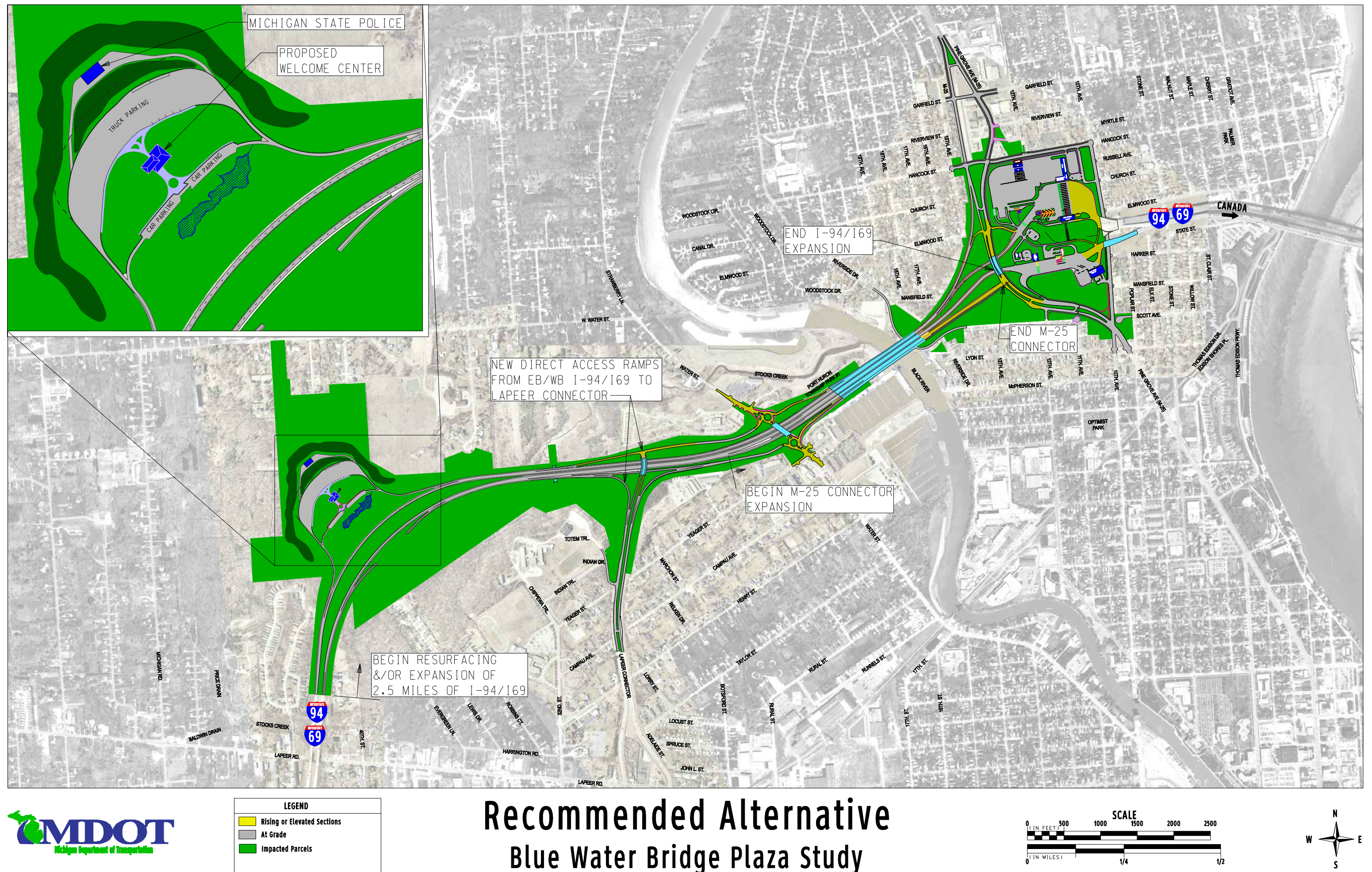


Figure 2.3.8 I-94/I-69 Corridor Improvements

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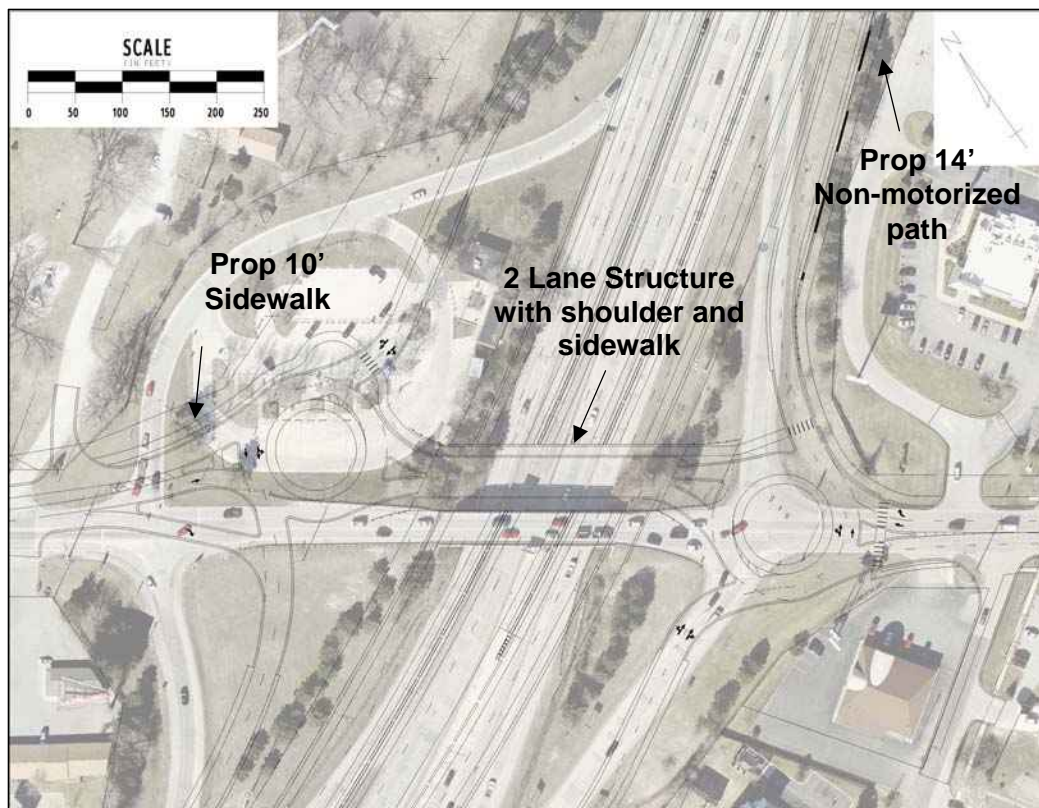


Figure 2.3.9 Water Street interchange

Lapeer Connector Connections: The Recommended Alternative will improve access for local traffic to the Lapeer connector. Currently, only traffic headed to I-94/I-69 east or from I-94/I-69 west can use the Lapeer connector. The Recommended Alternative provides access from all directions of I-94/I-69 as illustrated in **Figure 2.3.10**.



Figure 2.3.10 Lapeer Connector interchange

Eastbound I-94/I-69 will have direct ramp access from the freeway to the Lapeer connector. The other access movements will all use auxiliary/collector lanes. Traffic from northbound Lapeer connector wanting to travel east will travel through the Water Street interchange to connect to the eastbound lanes for local traffic.

A collector road will be constructed along westbound I-94/I-69 that will connect with the westbound intersection at the Water Street interchange. The collector road will include an intersection at the Lapeer connector that will allow westbound traffic to turn onto the Lapeer connector and head south. Northbound traffic on the Lapeer connector will be able to turn left at this intersection and proceed onto westbound I-94/I-69. Traffic from westbound I-94/I-69 wanting to travel south on the Lapeer connector will exit at Water Street, travel through the Water Street interchange and then onto the collector road. The collector road also would serve as the ramp from Water Street to westbound I-94/I-69 as well.

The new Lapeer connector configuration will require the entrance from Indian Drive onto the Lapeer connector to be shifted approximately 300 feet south to meet current MDOT safety standards.

New Michigan Welcome Center: In response to comments received on the DEIS, the location of the new Michigan Welcome Center was analyzed further. The first location was on the vacant land to the north of I-94/I-69 approximately one mile west of its current location (as shown in the DEIS). The second location was within the median (between eastbound and westbound lanes) of I-94/I-69, also one mile west of the current welcome center. The new Michigan Welcome Center property will encompass approximately 54 acres.

The median option was evaluated and dismissed due to geometric and safety concerns and the inability of this alternative to meet minimum MDOT and FHWA safety standards. Specifically, there was not enough traffic weaving space between the newly proposed westbound Lapeer connector on-ramp and a proposed left-hand off-ramp to the Michigan Welcome Center to safely accommodate this movement. The same problem existed with the eastbound

ramp from I-69 to I-94/I-69 and the eastbound welcome center off-ramp. Additionally, the amount of space available within the median did not provide enough acreage to meet the minimum design standards needed to accommodate parking requirements for a full service welcome center.

Figure 2.3.8 shows a conceptual layout for the new Michigan Welcome Center for the Recommended Alternative with the proposed I-94/I-96 corridor. The Michigan Welcome Center layout has changed slightly since the DEIS. The new Michigan Welcome Center will consist of a modern building per MDOT's current design standards for welcome centers along with parking for up to 100 cars and 50 trucks.

North of the truck parking area a Michigan State Police (MSP), Motor Carrier Inspection facility has been added. This facility will be used by MSP to assist in the enforcement of State of Michigan and Federal Motor Carrier regulations. The facility will include a weigh scale and a small inspection building.

The Michigan Welcome Center will be landscaped and will include a berm of up to 15-feet high on three sides to reduce noise and visual impacts for surrounding residents.

The Study Team has held ongoing public consultation and has examined conceptual ideas for the Michigan Welcome Center. The development of Context Sensitive Solutions (CSS) has been an ongoing part of the study process to date. The CSS approach involves all stakeholders to develop a facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. The Study Team will continue to follow the CSS process throughout the design phase.

The final parking layout and building structural appearances will be finalized during the design phase. MDOT will hold a public workshop to develop aesthetic and landscaping treatments for the Michigan Welcome Center. These will include preservation to the extent possible of existing forested land and wetlands on the site in areas not affected by the welcome center complex.

Local Road Improvements: The Recommended Alternative will include several improvements to local roads surrounding the

plaza. The intersection at 10th Avenue and Pine Grove Avenue will be reconstructed for the new Pine Grove Avenue. Scott Avenue will no longer connect to this intersection, ending in a cul-de-sac. North of the plaza, Hancock Street will be realigned to connect with the relocated Pine Grove Avenue and will be widened to three lanes between 10th Avenue and relocated Pine Grove Avenue. The M-25 connector northbound will end at Pine Grove Avenue. A minor realignment of Riverside Drive will occur where it crosses under I-94/I-69 and connects to Scott Avenue.

Pine Grove Avenue Relocation: The relocation of Pine Grove Avenue to the west of the new plaza is a key part of the Recommended Alternative. Existing Pine Grove Avenue between 10th Avenue and Hancock Street will be closed. The new relocated Pine Grove Avenue will be a boulevard from 10th Avenue northbound. Since the release of the DEIS, the proposed roundabout on Pine Grove Avenue at 12th Avenue has been changed to an indirect left. As illustrated on **Figure 2.3.11**, the proposed relocation of Pine Grove Avenue will have the following features:

- **A:** A ramp from northbound Pine Grove Avenue to the new plaza
- **B:** An intersection at the ramp for local traffic from I-94/I-69 to Pine Grove Avenue
- **C:** A bridge over the ramps from I-94/I-69 to the plaza
- **D:** An intersection at the ramp from the new plaza to Pine Grove Avenue to provide access in all directions and access from Pine Grove Avenue to westbound I-94/I-69
- **E:** A new intersection, Hancock Street and the new northbound lanes of relocated Pine Grove Avenue
- **F:** A connection to existing Pine Grove Avenue at Riverview Street for the northbound lanes of the realigned Pine Grove Avenue

2.3.3 Design Criteria (Corridor and Plaza)

The Study Team identified key engineering and facilities design criteria based on reasonable engineering standards and information on facilities and security requirements provided by CBP and GSA. Refer to **Section 2.2.1** of the **DEIS** for full design criteria details. All roadway and bridge design criteria

remained consistent between the DEIS and this FEIS, with the exception of roundabouts added at the Water Street interchange.

Roundabout Design Criteria: Roundabouts were designed at the Water Street interchange to maximize safety and to minimize ROW impacts to businesses and Township Park 1 along Water Street. Signalized intersections would have greater ROW impacts on businesses and park property located along Water Street.

Refer to the **Roundabout Technical Memorandum**, available from MDOT, for full roundabout details at the Water Street interchange. Traffic analysis was completed using RODEL (Roundabout Delay) software to determine the required geometry and resulting traffic performance. The two Water Street roundabouts have been designed according to the *MDOT Roundabout Guidance Document*. **Figure 2.3.12** and **Table 2.3.0** shows basic roundabout design criteria. Each roundabout was designed to provide a geometrically safe and efficient continual flow intersection that fits within the constraints of each individual intersection. This is unlike a regular intersection designed to specific design standards based on the design speed of the through road, in this case requiring additional ROW from adjacent businesses.

Recommended Alternative Blue Water Bridge Plaza Study

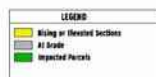


Figure 2.3.11 Recommended Alternative and Pine Grove Avenue Relocation

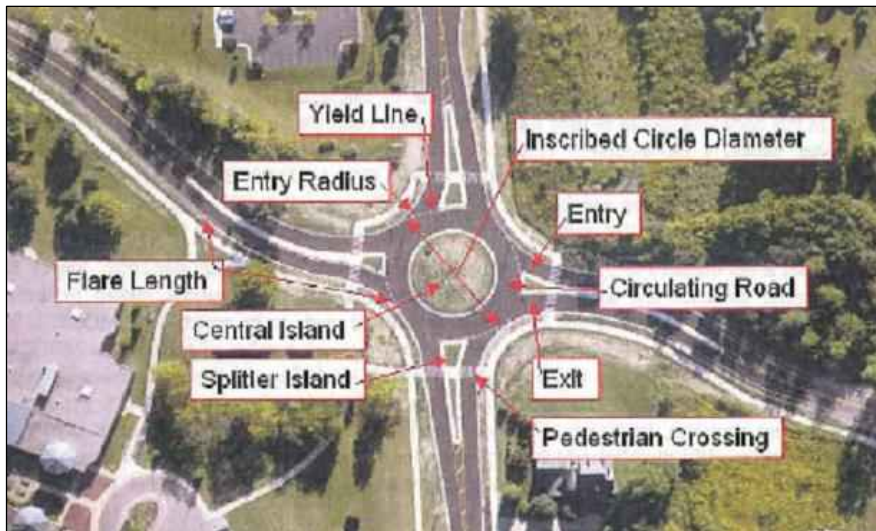


Figure 2.3.12 Basic Roundabout Criteria

Table 2.3.0 Design Criteria

Design Criteria	Value
Circulating Speed	25 mph +/-
Percentage Trucks	10%
Design Vehicle	WB-65
Entry Lane Width	Min.=10 ft., Max.=22 ft., Ave.=12 ft. to 16 ft.
Circulating Lane Width	1.0 to 1.2 times widest entry lane width
Level Of Service (LOS)	D or better
Average Delay (minutes)	1.0 or better

The goal of a roundabout design is to keep vehicles flowing at a controlled slow speed providing safe operation and increased efficiency over conventional intersections. The two Water Street roundabouts keep circulating speeds at or below 25 mph.

Each roundabout has a skew angle of 82 degrees for the I-94/I-69 exit ramps. This is more desirable for the elderly community than the signals in which both intersections have skew angles of 73 degrees. According to an Elderly Mobility Study conducted by the Southeast Michigan Council of Governments (SEMCOG), elderly drivers favor angles as close to 90 degrees as possible.

In **Tables 2.3.1** and **Table 2.3.2** are the Water Street roundabout summary of results for 2030 AM and PM Peak Hour traffic. The signal queue length is based on the 95th percentile, while the roundabout queue is two times the maximum queue length. Both equate to approximately the worst-case queue length.

Table 2.3.1 and **Table 2.3.2** show delay information at the WB intersection for a signal and roundabout. The majority of approach legs perform better with roundabouts than signals with the exception of NB Water Street in the PM peak. Queue lengths are all shorter for roundabouts which is desirable with the close proximity of the two intersections (370 feet) and the short length of each ramp.

Table 2.3.1 I-94/I-69 Westbound Off Ramp and Water Street Intersection – 2030 AM Peak Hr.

West Bound Intersection	AM 2030 volumes	Signalized			Roundabout		
		Ave. Delay (s)	LOS	Queue 95 th (feet)	Ave. Delay (s)	LOS	Max Queue (x2) (feet)
Water St. SB	600	28.5	C	369	23.4	C	150
Ramp EB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water St. NB	240	22.1	C	143	12.6	B	0
Ramp WB	1060	32.2	D	343	15.6	B	50
OVERALL	1900	29.8	C	N/A	17.7	B	N/A

Table 2.3.2 I-94/I-69 Westbound Off Ramp and Water Street Intersection – 2030 PM Peak Hr.

West Bound Intersection	PM 2030 volumes	Signalized			Roundabout		
		Ave. Delay (s)	LOS	Queue 95 th (feet)	Ave. Delay (s)	LOS	Max Queue (x2) (feet)
Water St. SB	470	28.9	C	295	22.8	C	100
Ramp EB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water St. NB	790	6.9	A	152	19.2	B	100
Ramp WB	860	33.1	D	392	13.8	B	50
OVERALL	2120	22.4	C	N/A	17.8	B	N/A

Table 2.3.3 and Table 2.3.4 show that roundabouts perform better than signals for all approach movements. Again, the queue lengths for the signals are significantly longer than for roundabouts. The closest signal is south on Water Street at Campau Avenue, which provides actuated signal access for the neighborhood. It is not anticipated that there will be any interaction between this signal and the southern roundabout.

Table 2.3.3 I-94/I-69 Eastbound Off Ramp and Water Street Intersection – 2030 AM Peak Hr.

East Bound Intersection	AM 2030 volumes	Signalized			Roundabout		
		Ave. Delay (s)	LOS	Queue 95 th Percentile (feet)	Ave. Delay (s)	LOS	Max Queue x2 (feet)
Water St. SB	650	32.1	D	392	14.4	B	50
Ramp EB	790	11.8	B	262	15.6	B	50
Water St. NB	450	21.9	C	175	12.0	B	0
Ramp WB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVERALL	1890	21.2	C	N/A	14.3	B	N/A

Table 2.3.4 I-94/I-69 Eastbound Off Ramp and Water Street Intersection – 2030 PM Peak Hr.

East Bound Intersection	PM 2030 volumes	Signalized			Roundabout		
		Ave. Delay (s)	LOS	Queue 95 th Percentile (feet)	Ave. Delay (s)	LOS	Max Queue x2 (feet)
Water St. SB	560	17.1	B	149	16.8	B	50
Ramp EB	940	33.4	D	470	12.6	B	50
Water St. NB	870	27.9	C	328	16.8	B	100
Ramp WB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVERALL	2370	27.5	C	N/A	15.1	B	N/A

Pine Grove Avenue Roundabout: Other elements of the project design were reviewed to ensure the best local road operations in conjunction with the plaza design. The roundabout previously located at 10th Avenue and Pine Grove Avenue has been replaced with a non-signalized boulevard with indirect lefts to provide more storage for local vehicles accessing the plaza in case of unforeseen delay from the plaza.

CBP Plaza Facilities/POR Design Criteria: **Table 2.3.5** highlights the basic CBP plaza design criteria changes from the DEIS to this FEIS. The changes were made to be consistent with CBP's revised POR issued in June 2008.

The following basic security features are required for the plaza and remained consistent between the DEIS and this FEIS:

- Separation of public and inspection functions
- Eight to ten-foot perimeter walls/fencing
- All vehicles entering and exiting the plaza are subject to inspection
- Exit control to ensure vehicles do not exit the plaza prior to completion of inspection

Table 2.3.5 Basic CBP Plaza Design Criteria

Facility	DRAFT EIS	FINAL EIS	Comments:
CBP Overall Acreage	60-80 acres	46 acres	
CBP Inspection Office Bldgs.	190,000 sq. ft.	44,000 sq. ft.	FEIS space includes space in Main, head house, Commercial Secondary, and Outbound Building's.
Loading Docks	18,000 sq. ft. 12 docks	18,000 sq. ft. 20 docks	
NII Building	3 NII Buildings	2 permanent NII 2 temporary NII	Adequate space is needed to accommodate truck circulation through the facilities.
Primary Inspection Booths	20 lanes with the ability to expand to 30	20 lanes with the ability to expand to 30	
Outbound Inspection Facilities	Space equivalent to a small port of entry, including: 10 inspection booths	4 inspection booths 2 docks	The outbound inspection facility shrank significantly for this FEIS as discussed in Section 1.6.1 .
Secondary Commercial Parking	100 spaces	36 spaces	
Employee Parking	580 spaces	170 spaces	Does not include MDOT staff parking.
Custom's Broker Office Space	12,000 sq. ft.	Not included on the plaza	Brokers will be located off the plaza. All future business will occur via a kiosk/call window.

- No major roadways located underneath plaza inspection facilities or under plaza exit/entry ramps (I-94/I-69), although minor city roadways may remain under the Blue Water Bridge and under plaza exit/entry ramps

- Incorporation of basic security standards from the GSA Land POE design guide for plaza facilities
- Space for Radiation Detection Portals
- Space for a USDA observation area for animal inspections. No unloading will occur on the plaza
- Space for impounding vehicles and hazardous materials containment is still required. However, the June 2008 POR required less vehicle parking

2.3.4 Projected Travel Time Delays

In response to comments received on the DEIS, the Blue Water Bridge Study Team prepared a Travel Time Delay Study. This analysis was prepared in response to DEIS commenters wanting to know how the Recommended Alternative would perform compared to existing border crossing delays. The results show delay in the form of wait times and queue length at the existing plaza compared to the 2030 No-Build Alternative and the Recommended Alternative.

Delay Analysis Model: To provide an accurate analysis of traffic operations on the Blue Water Bridge, it is essential for the entire border crossing to be treated as a system. Toll facilities, bridge structures, customs facilities, approach roadways, and the off-site routing of agricultural inspections all affect traffic movements and delay times. The Study Team utilized WATSim®, a computer simulation software, for the Blue Water Bridge delay analysis to model the proposed improvements.

WATSim® is a microscopic traffic simulation model. The model's strength lies in its ability to accurately represent the performance characteristics of individual vehicles as well as driver behavior over the full range of decision processes.

WATSim® models driver behavior to select the most appropriate toll, customs, or CBP lane, based on current queue. Simulated drivers "decide" which lane will offer the fastest service based on a realistic assessment of current conditions. The model also simulates weaving and merging movements on the plaza and bridge and was utilized to calculate delay and the spatial extent and duration of queues based upon plaza processing times. Just as important, WATSim© represents driver behavior along the local road and

freeway approaches and exits. This enables the simulation to accurately predict the effectiveness of the proposed improvements and confirm that plaza improvements do not result in adverse traffic operations on the I-69/I-94 corridor and local roads downstream from the plaza.

The model was used to validate and calibrate a delay condition for inbound primary inspection based on the existing number of car and truck lanes, current volume of traffic, and existing average processing times. It should be noted that processing times are dependant on many factors that can produce significantly different results such as national security level, or the types of trucks passing through the plaza.

The existing model was validated and was then used to simulate Future 2030 Build and No-Build conditions and analyze traffic operations. Delay is a measure of the time added to the normal travel time of a particular movement travelling below the free flow speed.

Data Collection: MDOT provided traffic and plaza operations data for the last week in July, 2008, based on the criteria above. The goal for the existing model was to provide validated processing capacities of the PILs in comparison to corresponding observed average queue lengths and wait times. These validated values for processing rates, queue length and wait time were then applied to the 2030 forecasted volumes to provide a prediction of the existing plaza under future traffic conditions and the proposed plaza. The Study Team selected Tuesday, July 29, 2008 as the sample to model, which demonstrated average heavy traffic volumes and queue lengths that reflected average wait times on an average busy day with all 13 PILs open, as summarized below in **Table 2.3.6**. The traffic volumes shown below are between 10 am and 4 pm, which were the heaviest volumes of that particular day. The data in **Table 2.3.6** was taken from CBP's log from July 29th, 2008.

Table 2.3.6 Recorded Sample Traffic Data

Hour Ending at	Cars	Lanes Open	Trucks	Lanes Open
Tuesday July 29th, 2008				
10 am	418	5 + 1	160	6 + 1
11 am	425	7 + 1	134	4 + 1
12 pm	359	7 + 1	140	4 + 1
1 pm	291	7 + 1	140	4 + 1
2 pm	391	6 + 1	134	5 + 1
3 pm	340	6 + 1	130	5 + 1
4 pm	348	7 + 1	102	4 + 1

The +1 in **Table 2.3.6** designates an open FAST or NEXUS lane. The data above at 11 am to 12 pm produced car queues to the center of the Blue Water Bridge with approximately 15 to 25 minutes delay, and truck queues from the U.S. inspection plaza over the bridge to the Canadian plaza with approximately 40 to 50 minutes delay as verified by MDOT Bridge personnel. This does not include inspection time or the time taken to travel the same distance at free flow speed. It measures the time taken for a vehicle to travel from the queue end to the stop prior to U.S. Inspections excluding the free flow speed time. The average time for a vehicle to travel from the Canadian plaza to the stop prior to U.S. inspection at free flow speed is approximately three minutes based on an average speed of 30 mph over a distance of 1.3 miles. Therefore, delay is a measure of the additional time taken to cross the border on top of free flow time (Canadian plaza to U.S. plaza) and processing time, in this case equal to an average of five minutes including start and stop times for heavy vehicles.

Assumptions: To validate the existing model a number of assumptions were made:

- All PILs are open for processing (fully staffed)
- Car queues backup to center of bridge and truck queues backup to Canadian plaza
- 17% of traffic uses FAST/NEXUS (trucks and cars)
- Mid-week, mid-day peak hour model
- 7 car lanes, 4 truck lanes, 1 FAST lane, & 1 NEXUS lane (11:00 a.m. sample design hour selected)

- Processing rates were deemed to be reflective of orange threat level on a typical day in July (2008)
- 25% commercial vehicles
- The validated average processing times are directly applied to the future No-Build scenario and the Recommended Alternative for 2030 traffic
- The FAST/NEXUS percentages were modified to 30% for the future models. There will be the ability on the proposed plaza to have up to two FAST and two NEXUS lanes, but this model assumes only one FAST and one Nexus lane.

Existing 2008 Model Validation/Calibration: The existing model was calibrated using the traffic volumes described in **Table 2.3.6** with all 13 booths open as 7 car lanes, 4 truck lanes, 1 FAST lane and 1 NEXUS lane. The approach lanes on the bridge include the left lane for trucks, the center lane for FAST/Nexus vehicles, and the right lane for cars. The processing rates were assigned based on the same average rates observed for the time slot based on a national security level of orange. FAST and Nexus vehicles are processed separately and at a quicker rate than standard processing, therefore 17 percent of vehicles were set as FAST and Nexus vehicles. The results were validated to field observations as displayed in Table 2.3.7.

Table 2.3.7 Model Outputs versus Field Observations

Description	Field Observations	Simulation
Vehicles Processed at Facility (per hour)	575 vehicles (average)	585 vehicles
Maximum Queue	Cars ~ 0.6 mile (half way across bridge) Trucks ~ 1.3 miles (close to Canadian Plaza)	Cars ~ 0.5 mile Trucks ~ 1.3 miles
Average Delay*	26.3 min/vehicle (weighted average)	22.3 min/vehicle (weighted average)
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).		

The results show that the existing model closely replicates the field observations and hence validates the model.

Proposed 2030 No-Build Models: Two different peak periods were analyzed; peak passenger traffic in July, and peak commercial traffic in October. The same assumptions and average processing times used for the existing model were applied to the existing plaza with 2030 traffic volumes. Below in **Table 2.3.8** is the summary of results for 2030 Passenger and commercial design hours.

The 2030 No-Build results show that the existing plaza would experience greater delays and backups in 2030 than with existing traffic for commercial and passenger design hours.

Table 2.3.8 2030 No-Build Passenger and Commercial Results

	Passenger Design Hour	Commercial Design Hour
PILs Configuration	8 Car Lanes 3 Truck Lanes 1 FAST Lane 1 NEXUS Lane	4 Car Lanes 7 Truck Lanes 1 FAST Lane 1 NEXUS Lane
Maximum Queue	Approx ½ mile beyond Canadian plaza	Beyond Study Area over 0.8 miles beyond Canadian plaza
Average Delay*	31.8 minutes/vehicle	23.7 minutes/vehicle
Hourly Throughout	814 Total vehicles processed in model	539 Total vehicles processed in model
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).		

Proposed 2030 Build Models: The same assumptions and average processing times used for the existing model were applied to the proposed plaza with 2030 traffic volumes. The same peak periods used for the future No-Build model were used for the future peak along with the high range volumes from the traffic forecast. The reason for using the high range forecast **was to analyze a potential** worst case scenario. The model assumes that all 20 future Primary Inspection Lanes (PILs) are operational. The results for the passenger and truck 2030 design hours are presented in **Table 2.3.9**.

Table 2.3.9 Passenger and Commercial Results

	Passenger Design Hour	Commercial Design Hour
PILs Configuration	13 Car Lanes 5 Truck Lanes 1 FAST Lane 1 NEXUS Lane	5 Car Lanes 13 Truck Lanes 1 FAST Lane 1 NEXUS Lane
Maximum Queue	Contained within plaza area	Contained within plaza area
Average Delay*	3.4 minutes/vehicle	3.1 minutes/vehicle
Hourly Throughput	944 Cars DHV 181 Trucks DHV 1125 Total vehicles processed in model	362 Cars DHV 496 Trucks DHV 858 Total vehicles processed in model
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).		

The results show that given the proposed plaza configuration and the 20 PILs that all traffic in the passenger and commercial design hours can be adequately processed with minimal delay. It is important to note that the two scenarios modeled are based on the following factors:

- Proposed 2030 DHV forecast
- Average processing times
- Fully staffed booths
- A set booth configuration
- No downstream impact on booth operations

All of the factors above are fluctuating variables that will affect the operation of the PILs; however, the 2030 models developed provide a level of confidence that given two conservative design hours, the proposed plaza operates well. The delay analysis results are summarized in **Table 2.3.10**.

Table 2.3.10 Delay Analysis Summary

Model Output	Passenger Peak		Commercial Peak	
	Future No-Build	Future Build	Future No-Build	Future Build
Vehicles Processed per hour	814	1110	539	844
Average delay* (min/veh)	31.8	3.4	23.7	3.1
Maximum Queue Cars	1.7 miles	Within Plaza	Within Plaza	Within Plaza
Maximum Queue Trucks	1.5 miles	Within Plaza	Beyond Study Area (>1.8 miles)	Within Plaza
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).				

Sensitivity Check: A sensitivity check was developed to provide a level of confidence as to how close to capacity the proposed model plaza would be operating during the two design hours. The number of PILs open during the passenger and trucks design hour models were decreased to assess the change in delay given the same traffic loads. During the passenger peak, commercial booths were closed and during the commercial peak, passenger lanes were closed. **Tables 2.3.11** and **2.3.12** are the summary of the sensitivity results.

During the passenger design hour, the model predicts that closure of three-commercial lanes would result in severe delay into Canada. During the commercial design hour, the model predicts that closure of three-passenger lanes would result in some additional delay.

Table 2.3.11 Sensitivity of Passenger Results

Case	Delay*	Maximum Queue (Cars)	Maximum Queue (Trucks)	Vehicles Processed per hour
18 Staffed Lanes	3.4 minutes/ vehicle	Within Plaza	Within Plaza	1110
15 Staffed Lanes	9.2 minutes/ vehicle	Within Plaza	Beyond Study Area (more than ½ mile beyond Canadian Plaza)	1036
13 Staffed Lanes	15.5 minutes/ vehicle	0.1 mile	Beyond Study Area (more than ½ mile beyond Canadian Plaza)	922
No-Build 11 Staffed Lanes	31.8 minutes/ vehicle	1.7 miles	1.5 miles	814
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).				

Table 2.3.12 Sensitivity of Commercial Results

Case	Delay*	Maximum Queue (Cars)	Maximum Queue (Trucks)	Vehicles Processed per hour
18 Staffed Lanes	3.1 minutes/ vehicle	Within Plaza	Within Plaza	844
15 Staffed Lanes	19.5 minutes/ vehicle	1.0 mile	Within Plaza	705
13 Staffed Lanes	22.8 minutes/ vehicle	1.0 mile	0.5 mile	668
No-Build 11 Staffed Lanes	23.7 minutes/ vehicle	Within Plaza	Beyond Study Area (more than ½ mile beyond Canadian Plaza)	539
* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).				

2.3.5 Comparison of Recommended Port Huron Port of Entry (POE) to other POE's

To provide the reader with a wider understanding of the Port Huron POE, this section provides an overview of some of the other northern border crossings. Port Huron is consistent with

other northern border plaza improvements. **Table 2.3.13** is a comparison of existing and proposed U.S plaza acreages and existing traffic volumes for the larger border crossings between the U.S. and Canada proposed for improvements.

Table 2.3.13 Existing and Proposed U.S. Plaza Acreages vs. Existing Traffic Volumes

Border Crossing	Existing Size (acres)	Proposed Size (acres)	Existing Truck Volumes (2005 ADT)	Existing Car Volumes (2005 ADT)	Existing Total Volumes (2005 ADT)
Ambassador Bridge	39	39	1,722,793	2,932,817	4,693,939
Peace Bridge	14	45	644,148	2,803,130	3,462,904
Lewiston/Queenston	28	30	481,081	1,547,309	2,034,413
Thousand Island Crossing	13	63	232,186	650,658	885,157
Champlain	16	27	388,869	973,706	1,371,040
DRIC	N/A	150	N/A	N/A	N/A
Blue Water Bridge	18	56	922,401	1,953,413	2,879,563

Based on public comments received for the DEIS the Port Huron POE was compared to the Peace Bridge. The historical traffic numbers above show that Port Huron has greater volumes of truck traffic despite having a lower overall traffic volume. Trucks require approximately three times the space as passenger cars and take longer to inspect. The Port Huron plaza accommodates toll collection facilities and outbound inspection facilities, which are not present on the Peace Bridge.

2.3.6 Project Staging/Maintenance of Traffic Goals

Maintenance of Traffic (MOT) is related to construction staging as they both have a substantial impact on the amount of time it takes to build a project. In construction staging, an in-depth plan is laid out for each stage of construction to determine which elements of a project may or may not be constructed simultaneously and to make sure that traffic flow can be maintained safely and efficiently.

Another important impact is how these stages affect the business areas that rely on the roads to be reconstructed and those used for detours. It must be understood that re-routing I-69/94 corridor and bridge traffic on to the surface streets within the city will cause gridlock. Police, fire and ambulance response will be interrupted, as will the operation of the

remaining businesses. All efforts must be made to minimize the local impacts of this project, to the greatest extent possible.

Should traffic need to be detoured during construction, then the presence of the existing Bascule Bridges within the city must be taken into consideration. In accordance with Federal Law, these bridges must open for boat traffic, which can cause a disruption in the flow of traffic for up to seventeen minutes per hour (17 min/hr).

MDOT and the city recognize the importance of minimizing the traffic impacts to the local community as a result of this project, to the greatest extent possible.

The main objectives of construction staging are to minimize delays, minimize congestion, maintain the required access, and complete the project in a reasonable timeframe. Below is a summarized list of preliminary planning goals for the project construction staging:

- Provide two lanes of I-94/I-69 traffic in each direction
- All plaza operations will be maintained throughout construction with the aid of temporary connections
- Minimize Water Street and Lapeer connector ramp closures
- Maintain Water Street traffic over I-94/I-69 throughout construction
- Complete the upgraded Black River Bridge prior to beginning construction on the plaza
- Maintain two lanes of Pine Grove Avenue traffic in each direction
- Maintain access to businesses and minimize delay to thru traffic

These planning goals will be further defined during the design phase. MDOT will make every effort to reach agreement with the City and County Road Commission engineering staffs on final goals and implementation strategies, prior to the beginning of construction.

Based on comments received on the DEIS in regards to MOT staging concepts, the Study Team revised the preliminary staging plan. The following is a description of the original

proposed MOT staging plan that meets the aforementioned MOT planning goals that could be implemented for the Recommended Alternative:

I-94/I-69 Corridor Construction Staging:

Stage 1: Temporary construction including crossovers and pavement widening to accommodate shifted traffic movement during later stages.

Stage 2: Construct southern portion of Black River Bridge, eastbound I-94/I-69, the new Michigan Welcome Center, Lapeer connector and Water Street interchanges.

Stage 3: Construct westbound portion of Black River Bridge, westbound I-94/I-69, and remaining portions of the Michigan Welcome Center.

Plaza and Local Roads Construction Staging:

Stage 1: Site preparation, including the demolition of all required structures within the construction limits and removing debris from the site, and construction of relocated Pine Grove Avenue.

Stage 2: All Pine Grove Avenue traffic will be rerouted onto the new Pine Grove Avenue facility. Construction of the southern portion of the plaza will commence.

Stage 3: Construction of the northern portion of the plaza will commence.

Stage 4: The existing elevated plaza and facilities will be demolished and graded with final elements of plaza construction completed.

Compliance with MDOT's Mobility Policy: MDOT's Work Zone Safety and Mobility Policy and corresponding manual were established by MDOT to improve safety and mobility in work zones by reducing congestion and traffic incidents. This policy will be followed to minimize congestion within work zones. MDOT will work closely with the city of Port Huron and St. Clair County Road Commission engineering staff and

make every effort to reach consensus on the final staging plan and maintenance of traffic provisions prior to the beginning of construction.

This FEIS staging and Final staging prepared are also designed in accordance with the Michigan Manual of Uniform Traffic Control Devices Design Manual. The current edition of the MDOT Standard Specifications for Construction presents guidelines for traffic control and maintaining traffic.

During the final design and construction phases of the project, MDOT will coordinate closely with the city of Port Huron, local emergency responders, and the Blue Water Transit Authority to minimize to the greatest extent possible delays associated with construction activity.

Construction Duration: The estimated time period to construct the corridor is three years. The estimated time period to construct the plaza and the associated local road realignments is three years. If construction begins in 2011 (likely on the Black River Bridge), construction would be completed on the entire project by the end of 2016.

2.3.7 Cost Estimate of the Recommended Alternative

Since the release of the DEIS, the Study Team has refined the cost estimate for the Recommended Alternative to reflect the changes made to the Recommended Alternative and additional engineering analysis. The costs were developed by estimating the items that make up the largest parts of the Recommended Alternative. The largest costs for the alternatives include:

- **Roadway Items** – such as pavement, curbs and earthwork
- **Drainage** – includes enclosed drainage systems, detention areas and erosion control treatments
- **Maintaining Traffic** – Includes all items associated with maintaining the flow of traffic throughout the stages of construction
- **Bridges** – includes all bridge items such as steel beams, and concrete foundations
- **Permanent Pavement Markings/Signs/Signals** – includes all items associated with the above

- **Miscellaneous Items** – includes buildings such as toll booths, inspection booths, main buildings and other items such as retaining walls, lighting and landscaping
- **Right-of-Way** – the estimated cost of purchasing homes, businesses, and vacant properties affected by the Recommended Alternative

The cost estimate is based on the engineering level developed during the environmental process. During the final design process, a final estimate will be prepared and distributed to construction contractors. The actual costs will depend upon the bidding process, which contractors and their suppliers will eventually bid on and determine the price of the selected alternative.

This estimate includes a fifteen percent contingency to cover unknown elements that will arise during design. This cost estimate is based on 2008 average unit prices tracked by MDOT. **Table 2.3.14** contains the estimated costs for constructing the I-94/I-69 corridor, the Black River Bridge with Riverside Drive, and the plaza with I-94/I-69 and local roads.

The U.S. cost includes the bridge, plaza, interchange, associated property (including purchase of mineral rights) and relocation of utilities. The costs in 2008 dollars have been adjusted for inflation to translate the total costs to year of expenditure. This total cost assumes completion of the entire project in 2017.

A week-long Cost Estimate Review was conducted March 16-20, 2009 involving cost specialists from FHWA, MDOT and their consultants. During this review, the Recommended Alternative cost estimates were updated using the FHWA level-of-confidence approach. A similar approach is used for all major projects, such as the Blue Water Bridge Plaza, to determine the risks and opportunities associated with project elements (i.e., what is the likelihood that costs might change from those now estimated?). At the 70% confidence level, the updated cost estimate for the Recommended Alternative is calculated to be \$583.5 million. This cost includes the U.S. plaza, the I-94/I-69 corridor and local street improvements. It is recognized that this Recommended Alternative cost estimate may vary as risks and opportunities are encountered.

That is why this cost total is somewhat greater than the base cost expressed in **Tables 2.3.14** and **2.3.15**. Continued attention will be directed to the cost issue throughout implementation of the Blue Water Bridge Plaza project.

The Recommended Alternative has been included in SEMCOG's fiscally-constrained Regional Transportation Plan and will be added to its Transportation Improvement Program (TIP) for 2009 prior to the signing of the Record of Decision.

Year of Expenditure Estimate: Based on the construction staging and phasing components identified in **Section 2.3.9**, MDOT estimates the earliest construction could begin on either the corridor or plaza project is 2011. The cost estimates in **Table 2.3.14** are shown in 2008 dollars. In order to obtain a more realistic picture of the anticipated construction costs, MDOT must inflate these cost estimates to the year construction is anticipated to begin.

Based on past inflationary trends, MDOT utilizes an annual inflation of 5% for major road and bridge construction projects to project future construction costs. Using this assumption, MDOT estimates the following Year of Expenditure Costs for the project in **Table 2.3.15**.

Table 2.3.14 2008 Construction Costs

Cost Item	Corridor	Black River Bridge	Plaza	Total
Roadway Items	\$13,940,000	\$2,800,000	\$46,020,000	\$62,730,000
Drainage	\$1,700,000	\$580,000	\$2,820,000	\$5,100,000
Maintaining Traffic	\$1,460,000	\$300,000	\$4,110,000	\$5,870,000
Bridge Costs	\$6,020,000	\$28,500,000	\$10,650,000	\$45,170,000
Pavement Markings/Signs/Signals	\$1,720,000	\$530,000	\$3,800,000	\$6,050,000
Buildings/Miscellaneous	\$12,450,000	\$10,730,000	\$102,360,000	\$125,540,000
Sub-Station Relocation	N/A	N/A	\$20,750,000	\$20,750,000
ROW	-	-	-	\$150,000,000
CE Costs	\$3,690,000	\$4,300,000	\$16,160,000	\$24,150,000
Total	\$41,000,000	\$47,700,000	\$206,700,000	\$445,400,000
Source: Wilbur Smith Associates, 2008				
2008 FEIS Total Cost Estimate = \$ 445,400,000 (includes Construction Engineering costs)				
2007 DEIS Total Cost Estimate = \$ 433,000,000				

Table 2.3.15 Year of Expenditure Costs

Year of Expenditure Cost Estimate:	Corridor	Black River Bridge	Plaza & Local Road	Total
Construction Sub-total	\$43,179,000	\$50,244,000	\$225,635,000	\$319,058,000
Design/ROW/Misc.				\$213,566,000
Utility Relocations				20,750,000
TOTAL				\$553,374,000
Environmental Clearance				\$11,700,000
Source: Wilbur Smith Associates, 2008 Environmental Clearance cost not included in \$553,374,000 estimate Assumes Design occurs FY 2009-2011 Assumes ROW occurs FY 2009-2012 Assumes Construction occurs FY 2011-2016				

2.3.8 Funding/Implementation of Recommended Alternative

Following the issuance of the Record of Decision, MDOT will develop and submit to FHWA a financial plan for the project. This document will identify the detailed project costs and the proposed funding sources to be utilized to fund all phases of the project. The financial plan will be developed in compliance with FHWA's guidelines for Mega Projects (defined as any project over \$500 million). The document will be available for public review once published, and will be updated annually in accordance with federal guidelines.

Funding for the design, ROW, and construction phases of the project will likely utilize funds from the following sources:

- Federal Aid SAFETEA LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) Earmarks
- Federal Aid (Corridor and Border Improvement Program)
- Bonds backed by revenue from an updated GSA lease, an updated Duty Free lease, and BWB Toll Revenue.

Any proposed toll increases on the U.S. side of the Blue Water Bridge will be completed in accordance with the existing toll agreement.

The transportation industry is always looking for alternative ways to finance the construction, operation and maintenance of its assets. One of the new innovative methods is through a

partnership between the public sector and the private sector. Under this approach, the private sector funds what are traditionally public sector activities (design, construction, operation and maintenance of a facility) in exchange for the revenue generated by this asset for a pre-determined amount of time. This arrangement is called a public-private partnership (PPP). This PPP funding mechanism may be utilized to finance all or a portion of the plaza expansion project.

During the financial plan development phase, MDOT and its cooperating agency partners will make an assessment whether a public-private partnership can meet the following objectives:

- Maintain a safe and secure Blue Water Bridge crossing
- Conform with all CBP/GSA plaza requirements
- Ensure the efficient and integrated cross-border movement of people, goods, and services
- Minimize the use of public (state and federal) funds to the greatest extent possible
- Provide public transparency and accountability
- Protect the public interest

This evaluation will also be combined with legislative efforts to allow Michigan to enter into such agreements with private concessioners and to provide the underlying authority for the use of PPPs. It is expected that a resolution of this issue will be complete shortly after the Record of Decision.

CHAPTER 3

THE ENVIRONMENT: WHAT'S THERE NOW AND PROJECT EFFECTS

The purpose of this chapter is to present the anticipated impacts of the Recommended Alternative on the social, economic, natural and cultural environments as they differ from the information presented in the DEIS. For impacts that have not changed, the information is briefly summarized and the reader will be referred to the DEIS for the complete discussion. For impacts that have changed, the updated information is discussed.

Resources Identified within the DEIS Not Impacted by this Proposed Action

The following resources are not impacted by the Recommended Alternative:

- Farmland
- Wild and Scenic Rivers
- Coastal Zone
- Coastal Barriers/Critical Dunes

A complete discussion of the topics not impacted by this study are available in the **DEIS, Sections 3.17 – 3.20.**

3.1 Land Use and Zoning

This section discusses the existing land use and zoning conditions within the Study Area and examines the impacts and compatibility of the No-Build and the Recommended Alternative on existing and future land uses.

3.1.1 What are the Land Uses in the Study Area?

Both the city of Port Huron and Port Huron Township have zoning ordinances that were updated in 2004. There are various land uses within the Study Area. These land uses include single-family residential, multiple family residential, commercial, and public facilities.

Both developed and undeveloped land can be found in the Study Area. Developed lands are primarily found east of the Lapeer connector interchange with I-94/I-69 and continue east to the St. Clair River, including parts of Port Huron Township and the city of Port Huron. These developed lands include various land uses, including residential, commercial, and recreational.

Undeveloped lands are generally found west of the Lapeer connector in Port Huron Township. Existing undeveloped lands are either wooded or open fields including a large tract of vacant land directly north and west of the MDOT maintenance facility located on I-94/I-69. Existing and planned land uses in the Study Area are very similar with the exception of the proposed Michigan Welcome Center site in the Township. This location is currently open space but is planned for residential use.

3.1.2 How Will the Alternatives Affect Land Use?

No-Build Alternative: The No-Build Alternative would have few impacts on land use policies and decisions within the Study Area. Future land use plans by both the city of Port Huron and Port Huron Township anticipate that the Blue Water Bridge Plaza would continue to function as-is and in its current location.

The increases in local traffic expected by 2030 would likely result in major bottle necks and queues at several intersections which will ultimately cause increased congestion throughout the entire network. This could impact access to local businesses.

Recommended Alternative: Improvements to the plaza will impact existing residential and commercial development within the city of Port Huron. The proposed plaza would encompass the area from M-25 Connector on the west, Hancock Street to the north, 10th Avenue on the east and most of Scott Avenue on the south. Land use categories located in this area include commercial, residential and a church. Residential areas north and south of the plaza would be impacted and would result in relocations. The condominiums east of the Black River and north of the interstate will be

removed for expansion of the Black River Bridge and freeway. In Port Huron Township, existing open space will be converted for use as a welcome center. This land is currently designated for residential use.

The Recommended Alternative is not consistent with current and planned zoning and land uses within the Study Area. This Alternative will affect commercial and residential establishments with the expansion of the existing Blue Water Bridge Plaza down to ground level. The proposed plaza and transportation related land uses would not be compatible with the local plans for the blocks it affects. The city of Port Huron Zoning Ordinance restricts residential properties to 2.5 stories and commercial properties to three stories.

3.2 Economics

The Blue Water Bridge is one of the United State's busiest border crossings for both trucks and cars. In 2007, more than \$40 billion in goods crossed the Blue Water Bridge by truck, more than \$110 million per day. Approximately 12.4 percent of the total truck trade between the United States and Canada crosses the Blue Water Bridge in Port Huron. This section will summarize the economic impacts described in the DEIS and any changes due to the revised plaza.

The movement of people and goods across the Blue Water Bridge affects local, regional, state, national and international markets and economic conditions. The United States Plaza at the Blue Water Bridge is a key part of the Blue Water Bridge border crossing system. The location of the plaza and its ability to efficiently and securely process people and goods entering and exiting the United States will impact all the markets. A new plaza will also require some existing businesses to relocate and will remove land from the tax base of the city of Port Huron.

3.2.1 How Would the No-Build Alternative Affect Businesses, Taxes, Jobs and Trade?

The No-Build Alternative will have minimal effects on existing local businesses and local tax bases. The No-Build Alternative will have negative impacts on trade between the United States

and Canada and between Michigan and Ontario due to increasing levels of plaza congestion causing longer delays for crossings and shipments across the Blue Water Bridge.

Impacts on Existing Local Businesses: The No-Build Alternative will have very minor impacts on existing local businesses. No businesses are relocated and there are no access changes that would affect existing business patterns.

Tax Base Impacts: There is no new right-of-way required for the No-Build Alternative and thus no direct impacts to the property tax base for any community. As the plaza would remain in Port Huron, there would be no impacts to the city income tax collected from plaza employees.

The No-Build Alternative would have long-term negative impacts on the tax bases of the United States, Canada, Michigan, and Ontario to the extent that revenues from international trade are harmed by border congestion. The potential trade and economic impacts of the alternatives are discussed in the following paragraphs.

Job Impacts: As the No-Build Alternative involves no property acquisition or changes in access, it is unlikely to have any direct impacts on local employment. Jobs related to trade and trucking would be negatively affected by a No-Build Alternative to the extent that congestion and backups raise the cost of transporting goods across the border, resulting in negative impacts on trade between the United States and Canada. There are substantial congestion issues at each of the major border crossings between Michigan and Ontario. Cars and trucks will not be able to avoid border congestion by diverting to other crossings.

Other studies have suggested that there will be high job losses unless the Michigan border crossings, including the Blue Water Bridge, are improved. A study completed for the Border Transportation Partnership concluded that approximately 90,000 full time jobs would be lost in the United States and approximately 35,000 full time jobs would

be lost in Canada if improvements are not made to border crossings between Ontario and Michigan¹.

Approximately 11 percent of employed city of Port Huron residents and 16 percent of employed Fort Gratiot Township residents work outside of St. Clair County. Many of these workers will use the roadways in the Study Area as part of their commute to and from work. Approximately 46 percent of employed Fort Gratiot Township residents work in the city of Port Huron or Port Huron Township and 10 percent of employed city of Port Huron residents work in Fort Gratiot. Most of these workers will pass through the Study Area as part of their journey to work each day. Congestion and backups within the Study Area and along I-94/I-69 due to the selection of a No-Build Alternative will lengthen the commute times for Port Huron Area workers traveling through the Study Area.

Trade Impacts: The No-Build Alternative would result in the worsening of traffic backups and congestion on the United States Plaza at the Blue Water Bridge. Future backups and congestion under a No-Build condition would have a negative effect on international trade. Backups and congestion are costly for trucking firms and the traveling public. The costs of backups and congestion include wages for drivers waiting to cross, lost productivity of trucks, and a reduction in the number of daily trips drivers can make across the border. The backups and congestion also cost trucking firms and manufacturers because of the uncertainty they create in the delivery process. Many industries in Ontario and Michigan, especially the auto industry, depend on parts from both sides of the border. Dealing with anticipated delays can be very costly due to production shut downs or the need to have an excess inventory of parts in case of delayed shipment. A detailed delay analysis can be found in **Section 2.3** of this FEIS.

Tax Base Impacts: **Table 3.2.1** lists the local property tax base impacts for the No-Build Alternative and the Recommended Alternative.

Why Does Uncertainty in Border Crossing Time Hurt the Economy?

Many manufacturers rely on parts arriving at their plants just when they need them. They do not want to pay for large warehouses of parts. Uncertainty in the time it takes to cross the border means that parts from factories on the other side of the border may not arrive when they are needed. As a result, manufacturers have to keep and store an extra supply of parts just in case of supply delays or risk having to shut down production. Keeping extra part supplies raises the cost of manufacturing.

¹ *Regional and National Economic Impact of Increasing Delay and Delay Related Costs at the Windsor-Detroit Crossings*. Canada-United States, Ontario-Michigan Border Transportation Partnership, 2004.

Table 3.2.1 Local Property Tax Base Impacts – 2008 Dollars

Alternative	City of Port Huron Current Taxable Value \$794.2 Million		Port Huron Township Current Taxable Value \$295.1 Million	
	Taxable Value Lost \$Millions	Percent of Total Taxable Lost	Taxable Value Lost \$Millions	Percent of Total Taxable Lost
No-Build	\$0.0	0.0%	\$0.0	0.0%
Recommended Alternative	\$12.9	1.6%	\$1.3	0.4%
Source: Raw Property Tax Data provided by city of Port Huron and St. Clair County.				

3.2.2 How Would the Recommended Alternative Affect Businesses, Taxes, Trade and Jobs?

The Recommended Alternative will have effects on remaining businesses due to the realignment of Pine Grove Avenue to the west of the new plaza. Additionally, the Recommended Alternative will reduce future congestion at the Blue Water Bridge border crossing, providing positive economic benefits to trucking firms and other companies and individuals involved in cross-border trade.

Impacts on Existing Businesses: The Recommended Alternative relocates 30 businesses, the same amount that was provided in the DEIS. The City West Alternative also eliminates six commercial-zoned vacant properties within the city of Port Huron's designated Blue Water Gateway Business Area.

The Recommended Alternative will maintain border traffic access to businesses remaining in the vicinity of the existing plaza by provided ramps between the plaza and the realigned Pine Grove Avenue. Travel times for cross-border traffic to access businesses in the vicinity of the plaza, along M-25, and to downtown will improve during periods of high traffic volumes due to plaza improvements.

The Recommended Alternative would also have minimal effect on businesses in downtown Port Huron. The alternative would include direct ramp access between I-94/I-69 and the realigned Pine Grove Avenue. This access will make it easier for eastbound travelers to get to downtown Port Huron and

would help support economic development efforts focused on the area between the plaza and downtown.

The city of Port Huron would lose approximately 1.6 percent (\$12.9 million) of its existing property tax base if the Recommended Alternative is constructed. Based on an average property-tax rate of \$38 per \$1,000 of taxable value for the city of Port Huron, this loss of tax base represents approximately \$490,000 in annual property tax revenue. The property tax base of the city of Port Huron grew approximately 8.62 percent annually between 2005 and 2008. The loss of tax base to the city of Port Huron would be less than one year's annual growth in taxable value. This loss of taxable value would represent a permanent loss to the city of Port Huron's revenue.

The Recommended Alternative may cause changes in the property values and property taxes for homes and business owners that remain in the vicinity of the plaza. It is very difficult to isolate the effect of transportation improvements on the value of particular parcels of land in an urban area. Some parcels may increase in value due to improved access while other parcels may lose value due to noise or visual impacts. A property, which may have lower value as a residential property, may also have a much greater value as a potential commercial site.

It is also difficult to differentiate between the effects of the project and changes in values due to property improvements or changes in the local market. As a result, MDOT does not assess the potential changes in value for individual properties that do not need to be purchased for a transportation improvement project. MDOT also does not directly compensate property owners for potential losses in property values due to the potential of additional value created by the project.

Job Impacts: The Recommended Alternative will relocate the jobs that are connected with the businesses that are displaced. The job relocations for the Recommended Alternative are listed in **Table 3.2.2**. The alternative would displace businesses with a total estimated employment of 400 people. If some of the displaced businesses choose to shut down or

move outside of the Port Huron area, there would be a loss of local jobs. The Recommended Alternative would benefit national employment by decreasing the cost of transporting goods across the border and increasing revenue and efficiency for firms that rely on the border crossing to ship products and parts between the United States and Canada.

The investment of construction dollars for the project will result in the creation of new jobs. When an investment is made in the construction of a new facility, the companies and individuals receiving payment for building the project will in turn spend the money they receive on other goods and services. Companies and individuals receiving benefits in terms of reduced travel time and accident costs would also invest portions of these savings in the local and state economies.

Based on the revised estimated construction cost for the Recommended Alternative of \$325 million, the Study Team estimates that 4,400 jobs will be created over a five-year construction period. Most of these jobs will be short-term construction related positions. Local job benefits from construction of the Recommended Alternative would depend in part on the availability of local materials and workers. MDOT seeks the best possible value from its investments when tendering construction projects and, like any other project, there is no guarantee local firms would be selected or local materials used.

Table 3.2.2 Estimated Local Job Relocations

Alternative	City of Port Huron Job Relocations	Port Huron Township Job Relocations
No-Build	0	0
Recommended Alternative	385	15

Trade Impacts: The Recommended Alternative would result in positive impacts on trade and commerce across the Blue Water Bridge through a reduction in travel times and congestion. Reduced congestion will lead to less uncertainty in border crossings, allowing firms that transport goods across the

border to meet just-in-time delivery schedules with less warehouse inventory required. A delay analysis was conducted for this FEIS and is presented in **Section 2.3** of this FEIS. On average, delay at the border will be reduced to approximately three to four minutes under the Recommended Alternative. Currently the average delay is approximately 20 to 25 minutes. **Table 3.2.3** summarizes the delay results from the analysis.

Table 3.2.3 Delay Analysis Summary

Model Output	Passenger Peak		Commercial Peak	
	Future No-Build	Future Build	Future No-Build	Future Build
Vehicles Processed per hour	814	1110	539	844
Average delay* (min/veh)	31.8	3.4	23.7	3.1
Maximum Queue Cars	1.7 miles	Within Plaza	Within Plaza	Within Plaza
Maximum Queue Trucks	1.5 miles	Within Plaza	Beyond Study Area (>1.8 miles)	Within Plaza
* Delay is the wait time required in addition to the time taken to drive the same distance at free flow speed. It does not include time spent in secondary inspection and only applies to primary inspection wait times.				

3.2.3 Economic Development Assistance

The Michigan Department of Transportation has incorporated several enhancements into the project that are designed to improve economic and community redevelopment opportunities within greater Port Huron. **Section 5.26** of this FEIS describes in more detail this initiative.

Economic Development Plan: MDOT will fund the development of an Economic Development Plan. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. The economy of Port Huron and St. Clair County is changing; globalization and new technologies continue to accelerate the rate of that change. With an

Economic Development Plan in place St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

Fund a local visitor center addition: In collaboration with the Greater Port Huron Chamber of Commerce, MDOT will fund an addition to the Chamber's office for the purposes of housing a local visitor center. This facility will be used to disseminate local tourism information and promote the tourism and economic development opportunities which exist within the Port Huron community.

Continue Coordination with Community Assistance Team: MDOT commits to continue coordination efforts with other state and federal agencies to bring additional resources to the greater Port Huron community. Such examples include coordinating with the Michigan Economic Development Corporation, the Michigan State Housing Development Authority, and the Michigan Department of Environmental Quality to determine if any of these agency's existing programs, grants, or resources can be applied to future redevelopment opportunities.

3.3 Air Quality

What is General Conformity Analysis?

General Conformity Analysis is performed to determine if air quality impacts of Federal actions will cause or contribute to a violation of the NAAQS or interfere with the purpose of a State Implementation Plan (SIP).

Section 3.9 of the **DEIS** presented a discussion on the National Ambient Air Quality Standards, (NAAQS) specific pollutants, Mobile Source Air Toxics (MSAT), and air quality status in the Study Area. Since the publication of the DEIS, the U.S. Environmental Protection Agency (EPA) has lowered the NAAQS for ozone from 0.08 ppm to 0.075 ppm. The air quality section of this FEIS presents the results of the General Conformity analysis and the status of Transportation Conformity for the Recommended Alternative.

3.3.1 What is the Current Status of Air Quality?

The Clean Air Act requires each state to have a State Implementation Plan (SIP) to demonstrate how it will attain and/or maintain federal air quality standards.

The Blue Water Bridge Plaza project is located within the Metropolitan Detroit-Port Huron Intrastate Air Quality

Control Region (AQCR #123). St. Clair County is currently in attainment status for five of the seven criteria NAAQS pollutants, and has been classified as being in non-attainment for PM_{2.5} and the eight-hour ozone standard.

The Michigan Department of Environmental Quality Air Quality Division, along with other governmental agencies, operates a network of 45 air monitoring sites around the state of Michigan. One of these monitors is located at 2525 Dove Road in Port Huron. This monitoring site collects data on SO₂, PM_{2.5} and O₃ (ozone).

Annual SO₂ concentrations have declined rather steadily from the 1998 level of 0.012 ppm to the 0.006 to 0.008 ppm range for the last 8 years. These levels are well below the 0.030 ppm NAAQS for SO₂.

The 8-hour O₃ levels at the Port Huron site, during the period from 1999 to 2005, have varied between 0.086 and 0.088 ppm. In 2006 and 2007 the levels dropped to 0.083 and 0.082 ppm, respectively. These levels exceeded the previous NAAQS of 0.08 and presently exceed the revised NAAQS of 0.075 ppm.

The PM_{2.5} concentrations, both annual and 24-hour, like the O₃ levels, have varied from 1999 through 2007 at the Port Huron site. Annual concentrations have varied between 15.09 µg/m³ and 12.04 µg/m³. The highest occurred in 2005 with the second highest concentration in 2000, the second lowest was 2007, and the lowest occurred in 2004. During the 1999 through 2007 time period, none of the three year averages has exceeded the 15 µg/m³ standard. Similar variations also exist in the 24-hour concentration, with a low of 32.2 µg/m³ in 2004 and a high of 47.6 µg/m³ in 2006. In the period from 1999 through 2006, the Port Huron concentrations did not exceed the 65 µg/m³ standard. However, under the new 24-hour standard of 35 µg/m³ (effective December 17, 2006) the standard has been exceeded during both the 2004 – 2006 and the 2005 – 2007 periods with 3-year mean values of 39 µg/m³ for both periods.

What is Transportation Conformity?

Transportation conformity applies to highways and mass transit and establishes the criteria and procedures for determining whether transportation plans, programs and projects funded under Title 23 U.S.C. or the Federal Transit Act conform to the State Implementation Plan and the General Conformity Regulations.

3.3.2 What Impacts from Carbon Monoxide are Anticipated with the Recommended Alternative?

A carbon monoxide (CO) microscale analysis was completed on the City West Alternative in the DEIS. The Recommended Alternative is not significantly different from the City West Alternative in the DEIS. Therefore, the conclusions determined in the DEIS in the CO microscale analysis remain valid for the Recommended Alternative.

The CO microscale analysis in the DEIS focused on the M-25/Hancock Street intersection which is the worst-case location for CO because of the potential for backups at the signalized intersection and its relatively close proximity to the general public. The one-hour maximum concentrations were in the low 4.0 ppm to low 5.0 ppm range. These numbers include the background concentration of 3.4 ppm. These concentrations do not exceed the one-hour NAAQS of 35 ppm. An eight-hour CO analysis was not required because the one-hour total is less than the eight-hour NAAQS standard (9 ppm).

The calculated concentrations are within the NAAQS for CO, so no violations of the standard are anticipated with the Recommended Alternative.

3.3.3 What Impacts from Particulates are Anticipated with the Recommended Alternative?

The Blue Water Bridge is unique in that it has a customs plaza where trucks will idle as they queue for customs inspection at both primary and potentially secondary. With the Recommended Alternative being proposed in this FEIS, a number of steps have been taken to address the potential impact of particulates from the proposed project and they all center on conformity.

The EPA has set air quality standards to protect public health and welfare (referred to as “the Standards”), see **Section 3.9.1** of the **DEIS**. These standards were used as the basis for determining St. Clair County’s area’s air quality designation discussed earlier in this section. A conformity determination takes several forms when applying the Clean Air Act. Under

Section 176(c)(4), the General Conformity Rule plays an important role in helping states and tribal regions improve air quality where the standards are not met. EPA has promulgated two sets of regulations to implement the conformity requirements of the Clean Air Act: (40 CFR 93, subpart A): 1) Transportation Conformity Regulations, which apply to highways and mass transit and establish the criteria and procedures for determining whether transportation plans, programs, and projects funded under title 23 U.S.C. or the Federal Transit Act conform with the State Implementation Plan (58 FR 62188); and, 2) the General Conformity Regulations, which apply to everything else.

The new plaza will have a number of improvements over the existing plaza from an operations standpoint that will mitigate potential air quality issues. The Recommended Alternative will be better equipped to handle trucks that are part of the Free and Secure Trade (FAST) program. This program provides for expedited processing through Primary Inspection and U.S. Customs and Border Protection anticipates enrollment in this program to grow with the construction of the new plaza. More trucks in the program will result in fewer trucks at the other primary booths and less trucks in the secondary inspection area. Another benefit with the new plaza is less truck queues due to the increased number of primary booths (see **Projected Travel Time Delays** in Section 2.3.4). Trucks sent to the secondary inspection area are required to turn off their engines due to security issues. Improved operational efficiencies of the new plaza will be a vast improvement over the current conditions on the existing plaza.

General Conformity: General Conformity *de minimis* (threshold) emission levels for fine particle pollution (PM_{2.5}) have been set to determine when General Conformity requirements apply (40 CFR 93.153). The Blue Water Bridge project, being a transportation project, must comply with transportation conformity rules. Since the plaza also will have idling vehicles as they queue for customs inspection - both primary and, potentially, secondary, these activities have been examined in terms of General Conformity to determine whether *de minimis* levels of 100 tons a year are exceeded for PM_{2.5} during system

operations. The year of highest emissions, 2016, had been analyzed.

Because of the size of the Blue Water Bridge project, the *de minimis* threshold will also be applied to construction activities to determine whether PM_{2.5} levels exceed 100 tons in any construction year.

PM_{2.5} Operation de minimis Levels: The PM_{2.5} *de minimis* analysis considered the Annual Average Daily Traffic Estimate (AADT) entering and exiting the plaza in 2016, the distance traveled through the plaza, including secondary inspection and average delays. The number of vehicles entering the plaza was multiplied by the lengths of the various routes through the plaza to arrive at vehicle miles traveled per day, (VMT). The VMT was multiplied by PM_{2.5} emission factors developed with EPA's MOBILE6.2 to arrive at daily free flow emissions through the plaza. Since each vehicle will stop as it passes through the plaza, the average delay time presented in the Blue Water Bridge Plaza, Technical Memorandum, Delay Analysis was multiplied by the AADT and idle emission factors developed with EPA's MOBILE6.2 to arrive at daily idle emissions. The daily free flow and idle emissions were converted to annual emissions to compare to the 100 ton criteria. The analysis indicated that annual emissions would be in the range of 0.25 tons per year, significantly below the 100 ton per year criteria for general conformity. Therefore, the provisions of 40 CFR 93.153 related to general conformity do not apply.

PM_{2.5} Construction de minimis Levels: The construction of the plaza will take place over approximately four years with numerous contracts for demolition, grading, buildings, paving, etc, sequenced over the period. The PM_{2.5} emissions from these various construction projects were developed based upon a procedure prepared for the EPA and published in the Technical Memorandum, "Develop a National PM₁₀ and PM_{2.5} Inventory from Construction Operations." The basic procedure uses the total cost of a project, in this case the cost for the entire plaza, an area bounded by relocated Pine Grove Avenue, Hancock Street and 10th Avenue, times a cost/acre conversion, the duration of the project, a soil moisture levels factor, a silt content factor, a control efficiency, a PM₁₀ to PM_{2.5}

conversion factor and an emission rate of 0.19 tons PM₁₀/acre/month. Based upon variations in the soil moisture and soil silt content levels, a range of PM_{2.5} representing the best and worst case conditions for particulate emissions were developed. PM_{2.5} emissions using the lowest silt content and highest moisture levels resulted in average annual PM_{2.5} emissions of 0.6 tons. Applying the highest silt content with the lowest soil moisture level produced an average annual PM_{2.5} emission of 55 tons per year. Both of the values were below the 100 ton per year criteria for general conformity. Therefore, the provisions of 40 CFR 93.153 related to general conformity do not apply.

Transportation Conformity: The Clean Air Act requires each state to have a State Implementation Plan (SIP) to demonstrate how it will attain and/or maintain federal air quality standards. The Southeast Michigan Council of Governments (SEMCOG) collaborates with the Air Quality Division of the Michigan Department of Environmental Quality (DEQ) on the work needed to prepare and/or update a SIP. SEMCOG is responsible for mobile source (transportation) emissions in Southeast Michigan. SEMCOG's 2030 Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP) must undergo a quantitative analysis demonstrating that emissions levels associated with implementing planned transportation projects are below designated emissions level limits (budgets) set forth in the SIP. In so doing, SEMCOG is managing and facilitating the transportation air quality conformity process in Southeast Michigan. The Blue Water Bridge project is subject to air quality transportation conformity review through SEMCOG's inclusion of any Blue Water Bridge roadway improvements in its RTP.

Air quality conformity analyses for mobile sources in Southeast Michigan and specifically in St. Clair County, currently involve: ozone (and its precursors, volatile organic compounds and nitrogen oxides) and PM_{2.5}. SEMCOG has completed its regional conformity analysis for the Recommended Alternative and has incorporated the analysis into the 2030 RTP amendment. Final approval was received from the FHWA December 12, 2008.

PM_{2.5} Qualitative Hot-spot Analysis: Hot-spot conformity analyses are designed to evaluate whether there are air quality impacts on a smaller scale than an entire non-attainment or maintenance area. It relates a project to the NAAQS on a more localized basis. Hot-spot conformity for PM_{2.5} is done on a qualitative basis until appropriate methods and modeling guidance are available for quantitative analysis.

The qualitative hot-spot analysis for the Recommended Alternative included a discussion on existing particulate levels in St. Clair County, existing and future traffic queuing at the inspection/toll booth areas, projected trends in heavy-duty diesel vehicle particulate emissions, and a description on the how the proposed project would change particulate emissions based on regional data from SEMCOG. Based on the review by the Interagency Working Group (IAWG) in Southeastern Michigan, it was concluded that the Recommended Alternative meets conformity requirements of 40 CFR 93.116 and 93.123 for the PM_{2.5} air quality standards

3.3.4 Is Any Mitigation of Air Quality Impacts Needed?

Based on the air quality analyses completed for the proposed improvements, this project will not contribute to any violation of the NAAQS. MDOT's 2003 Standard Construction Specification Sections 107.15(A) and 107.19 will apply to control fugitive dust during construction and cleaning of haul roads. No additional mitigation is proposed. However, MDOT and CBP will continue to utilize best management practices such as anti-idling procedures on the plaza particularly at toll booths, inspections stations and when backups occur due to incidents and heavy traffic. Additionally, MDOT will utilize Intelligent Traffic Systems, such as changeable message signs along the I-94/I-69 corridor to most effectively manage traffic operations and reduce long durations of idling where feasible.

3.4 Noise Impacts

The DEIS provides an in-depth discussion of the existing noise levels in the Study Area, the FHWA Traffic Noise Model® (TNM) used to model existing and future design year noise levels, and information on future noise levels for the previous

alternatives. This section of this FEIS will discuss any changes to noise impacts for the Recommended Alternative since the release of the DEIS.

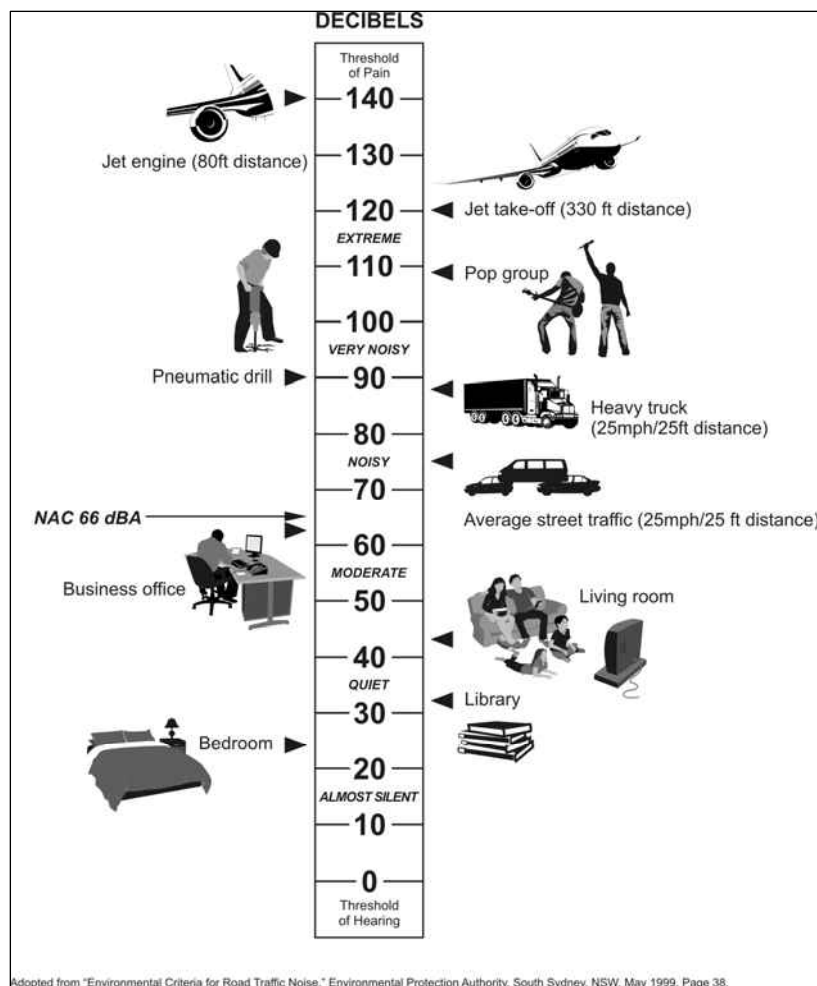


Figure 3.4.1 Illustrated Comparison of Noise Sources

3.4.1 What are the Existing Noise Levels in the Study Area?

The FHWA has established Noise Abatement Criteria (NAC) to consider the noise impacts on certain land uses. These criteria are in the Code of Federal Regulations, Title 23 Part 772. MDOT has a Highway Traffic Noise Analysis and Commission Policy 10136, Noise Abatement, for implementing the NAC.

According to FHWA and MDOT policy, noise abatement measures will be considered when the predicted noise levels approach or exceed those values shown for the appropriate activity category in **Table 3.4.1**, or when the predicted traffic

noise levels substantially exceed the existing noise levels. MDOT defines “approach” as being within 1 dBA less than the noise levels shown in **Table 3.4.1**. MDOT has defined an increase over existing noise levels of 10 dBA or more as being “substantial.” TNM was used to model future peak hour traffic noise levels for the Recommended Alternative, for the year 2030. **Figure E.25** in the **DEIS, Appendix E** provides model noise levels for each receiver location.

Table 3.4.1 Noise Abatement Criteria, Hourly A-Weighted Sound Level in dBA

Activity Category	L _{eq} (1 Hr period)	Description of Activity Category / Land Uses
A	57 dBA (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the lands are to continue to serve their intended purpose.
B	67 dBA (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries and hospitals.
C	72 dBA (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
D	---	Undeveloped lands.
E	52 dBA (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.
Source: Code of Federal Regulations, Title 23 Part 772, Revised April 2005		

3.4.2 How is the Recommended Alternative different from the Noise Analysis completed for the DEIS?

The design hour noise levels projected for the Recommended Alternative differ slightly from the City West Alternative as described in the DEIS along Hancock St. east and west of relocated Pine Grove Avenue and along 10th Avenue between Pine Grove Avenue and Hancock St. The changes in noise levels occurred as a result of more uniform treatment of traffic operations within the TNM model, as a response to concerns raised during the public comment period. None of these

changes resulted in more properties being exposed to noise levels above the NAC.

The refining of traffic projections along the M-25/Pine Grove Avenue and the lowering of the proposed profile for the M-25 Connector south of Hancock St., as compared to the City West Alternative, resulted in slightly higher noise levels north and south of Hancock St. These changes resulted in 13 additional residences being exposed to design hour noise levels above the NAC west of M-25 connector/Pine Grove Avenue.

No-Build Alternative: Year 2030 No-Build traffic noise levels within the corridor would approach or exceed the NAC at 101 residences, six businesses including one hotel/motel, and at Township Park No. 1.

Recommended Alternative: The Recommended Alternative would cause 2030 design hour noise levels to approach or exceed the NAC at 59 residences and three businesses including one hotel/motel, and at one township park. None of the noise receivers would be exposed to noise levels that “substantially exceed existing” noise levels. Certain areas of the plaza are surrounded by solid security fences, these could be ground mounted or mounted to retaining walls. In areas where these security fences, or retaining walls, are relatively close to local street traffic, along sections of Hancock St., relocated Pine Grove Avenue, and 10th Avenue, these large surfaces will reflect or bounce a portion of the traffic noise back into the community. The theoretical maximum increase in noise levels from a perfectly reflective surface, with the surface abutting the traffic lanes, would approach 3 decibels. Since the security fences will not be a perfectly reflected surface, and none of the security fences directly abut the traffic lanes, the relative increase due to reflection is closer to 1 to 2 decibels above the TNM results presented in **Figure E.25** in **Appendix E** of the DEIS.

3.4.3 How Will the Noise Levels that Exceed the NAC be Mitigated?

Only the construction of noise barriers was reviewed as a mitigation measure of the reflected traffic noise in the area as other measures did not meet the purpose and need of the

project or as in the case of constructing a noise berm, was not feasible.

Under the Recommended Alternative, mitigation of the reflected noise in the area of the security barriers could be accomplished with absorptive facings on the roadway side of the security fences. Depending on the absorption coefficient of the materials and the area covered it is possible that the noise increases created by the reflected noise could be minimized.

3.4.4 Where were Noise Barriers Considered?

Noise barriers for the Recommended Alternative were analyzed at two locations. Noise barriers were modeled west of the M-25 Connector between Hancock Street and the Black River and north of Hancock Street to Garfield Street. In the area from Hancock Street south to the Black River, two alternative noise barriers were modeled.

What is “Reasonableness”?

Noise mitigation will be considered “reasonable” if the construction cost is less than \$38,060 or less (in 2007 dollars) per benefiting dwelling unit.

The results of the barrier analysis, including barrier location, future hourly Leq noise levels without and with a barrier, barrier length and height, estimated cost, the number of residential units benefited, the noise reduction provided by the barrier and the cost per residential unit are presented in **Table 3.4.2**. All of the noise barriers analyzed meet MDOT’s feasibility criteria. However, none of the noise barriers (Noise Barriers 7, 7a, and 8) meet MDOT’s definition for “reasonableness”.

There are other areas along the I-94/I-69 corridor where individual receptors exceed the NAC, such as Receivers 1, 3 and 4 which extend along the right-of-way for approximately 1,400 feet. However, it is impossible to design a barrier for single receptors that would meet MDOT’s cost criterion of \$38,060. There are additional locations along the improved local streets in Port Huron where receptors exceed the NAC. In these areas, local cross streets and driveway access prohibit the construction of feasible noise barriers.

3.4.5 Are There Considerations for Preventing Future Development from Being Adversely Affected by Noise?

As part of the noise modeling effort, a “setback” distance was calculated for undeveloped lands. The setback distance along

the I-94/I-69/M-25 corridor was calculated as 340 feet for the Recommended Alternative. Noise levels within this distance, measured perpendicular to the centerline of the nearest lane of the roadway, was modeled to be 66 dBA or greater. This setback distance was calculated to assist local planning authorities in developing a land use management plan for future business opportunities along the project in an attempt to prevent future development that would be incompatible with traffic noise.

What is “Setback Distance?”

The distance from the highway to a point where the noise levels will be below the Noise Abatement Criteria

3.4.6 What will the Effects from Construction Noise be and How would they be Mitigated?

The major construction elements of this project are expected to be demolition, hauling, grading, paving, and bridge construction. General construction noise impacts for passersby and those individuals living or working near the project can be expected particularly from demolition, earth moving and paving operations. Considering the relatively short-term nature of construction noise, and the fact that construction will only take place from dawn to dusk, impacts are not expected to be substantial. The ability of buildings to reduce indoor noise levels to acceptable levels is believed to be sufficient to moderate the effects of intrusive construction noise.

3.4.7 What are the Next Steps in Addressing Noise Impacts?

MDOT does not recommend the installation of noise barriers for the Recommended Alternative. **Table 3.4.2** and **Appendix E, Figure E.24** of the **DEIS**, stated that a noise wall would be constructed, however, after further analysis, this noise wall does not meet criteria based on state noise policy. If final design results in substantial changes in roadway design from modeled conditions, noise abatement measures will be reviewed. During the design phase the feasibility and reasonableness of the noise barriers are reviewed in greater detail.

Table 3.4.2 Acoustical Mitigation Noise Barrier Locations Analyzed

Barrier Number	Locations	Existing Leq(1h) Noise Levels, dBA	Range of Future Leq(1h) Noise Levels, dBA		Noise Reduction (dBA)	Barrier Characteristics		Cost ¹⁾	Number of Units Attenuated	Cost/ Unit	Feasible and Reasonable
			w/o Barrier	Barrier		Length (ft)	Height (ft)				
	Recommended Alternative										
7	West of M-25, between Hancock Street and Black River	59 – 73	60 - 72	55 – 62	5 - 12	2,522	12 – 19	\$1,649,702	42	\$39,279	No
7a	West of M-25, between Hancock Street and Elmwood Street	60 – 69	62 – 68	57 – 60	5 – 10	1,399	14 – 20	\$928,444	24	\$38,685	No
8	West of M-25, between Garfield Street and Hancock Street	66 -68	65 – 68	56 – 61	5 – 11	800	9 – 12	\$391,287	9	\$43,476	No

3.5 Community and Neighborhood Impacts

This section discusses how the Recommended Alternative will affect the local residents, neighborhoods, and community facilities. A full discussion of who lives in the community, how they travel, and where schools and other community facilities can be located in the DEIS. The following paragraphs will discuss the changes since the release of the DEIS on existing neighborhoods and community facilities. Many of the potential effects of the Recommended Alternative on neighborhoods such as relocations, noise, air quality and visual appearance are discussed in detail in other sections of this FEIS. These affects will be mentioned briefly here and readers will be directed to the other sections of this document.

3.5.1 How Will the Alternatives Affect Neighborhoods?

No-Build Alternative: The No-Build Alternative will affect the neighborhoods surrounding the existing plaza as increased congestion will make it more difficult to live near the plaza. Without improvements, local residents can expect increased back-ups and congestion leading to increased noise and air quality issues.

With the No-Build Alternative, Pine Grove Avenue and Hancock Street will not be improved. Increased congestion on these local roads will make it more difficult for local residents to access local businesses. Heavily congested roads will also continue to serve as barriers between the neighborhoods surrounding the plaza.

The No-Build Alternative does not relocate any homes in existing neighborhoods or any businesses that would serve these neighborhoods.

Recommended Alternative: The DEIS stated that the Recommended Alternative would displace 129 residences and 30 businesses. As a result of feedback MDOT received regarding the size of the plaza and the number of relocations, the plaza footprint was reduced. See **Section 2.2** for a discussion on the process used to determine the reduced plaza size. By reducing the plaza size residences and businesses were no longer needed from the area directly south of the new

plaza and the displacement numbers were reduced. However, upon further evaluation it was concluded that the neighborhood located north of the relocated Pine Grove Avenue and south of the new plaza would experience adverse impacts due to separation and isolation from their core neighborhood. As a result, the residences and businesses located in this area have been added back into the impacted area of the project. See **Section 3.7 Relocations** for a complete discussion of relocation impacts.

Four residences on the south side of Scott Avenue near Riverside Avenue are no longer required for construction of the Recommended Alternative.

The Recommended Alternative will require the relocation of 13 homes along Church Street, Elmwood Street, and 10th Street in the neighborhood northeast of the existing plaza. Some of the homes along Elmwood Street are already vacant or have been changed to office use.

The Recommended Alternative turns Pine Grove Avenue into a boulevard allowing it to remain a principle north-south street for the entire Port Huron Area along with 10th Avenue. The Recommended Alternative would require 30 businesses to be displaced. These businesses include gas stations, restaurants, and offices that serve the local community as well as border crossing traffic. With the plaza expansion in Port Huron, many of these businesses may want to find new sites near the plaza. This may create new pressures to convert homes in the nearby neighborhoods to business sites. There will likely be a period of time, after the businesses are displaced, when local residents will have to travel further to get to local businesses. Residents in the neighborhoods surrounding the plaza that walked to the nearby restaurants or filled-up at the nearby gas stations will have to travel a few extra blocks to get the same services. Impacts to businesses are discussed further in **Section 3.2 Economics**.

The new plaza for the Recommended Alternative will still divide the community from north to south and from east to west as the impact area is very similar to the plaza shown in the DEIS. The neighborhoods to the west of the plaza would be isolated from neighborhoods to the south and east of the

plaza. Although the new plaza is smaller north to south, the perception remains that the plaza is a barrier that splits the community in half.

3.5.2 How Will the Alternatives Affect Community Services and Facilities?

The alternatives would have little effect on community services. There are no community agencies located in the Study Area and no community service providers would be relocated. The Recommended Alternative would affect schools, churches, parks, and private community facilities. These effects are discussed below.

No-Build Alternative: The No-Build Alternative would not affect any schools, churches, parks, and public or private community facilities. Long-term congestion from backups on the plaza onto I-94/I-69 would affect the speed of school bus traffic across the Black River Bridge.

Recommended Alternative: The Recommended Alternative will displace the First Free Methodist Church at the corner of Elmwood Street and 10th Street. This alternative will also require some property from the Port Huron Area School District located at the southwest corner of the interchange between the Lapeer connector and I-94/I-69. No school buildings or facilities would be acquired.

Construction of the Recommended Alternative will lead to short-term traffic congestion and detours that would affect school bus traffic and emergency services. All detours will be discussed with local officials before they are put in place. The Recommended Alternative will ultimately improve the flow of local traffic.

The Recommended Alternative will impact one private recreational business. The Port Huron Lanes Bowling Alley, located at the corner of Hancock Street and the M-25 Connector would be relocated.

3.5.3 How Will the Alternatives Affect Public Parkland and Potential Section 4(f) or 6(f) Properties?

No-Build Alternative: The No-Build Alternative would not affect any public parklands or Section 4(f) or 6(f) properties.

Recommended Alternative: Minor property acquisition is required from Port Huron Township Park No. 1 for the construction of the freeway and interchange at Water Street as part of the Recommended Alternative. Access to the park may be altered during construction but the playground equipment, pavilion and service building, and fishing access will not be affected by the construction.

The E.C. Williams House would be acquired and relocated for the construction of the Recommended Alternative to accommodate a larger plaza area. Further discussion of the impacts on parkland and historic sites is located in **Section 3.15 Cultural Resources** and in **Chapter 4 Section 4(f) and 6(f) Evaluation**.

3.5.4 How Will the Alternatives Affect Emergency Services?

Both the No-Build Alternative and the Recommended Alternative do not require the relocation of any hospitals, fire, police, or other emergency service facilities. The Recommended Alternative will require changes in emergency access routes and response times.

3.5.5 How Will the Alternatives Affect Pedestrians and Cyclists?

No-Build Alternative: The No-Build Alternative will not have any affect on Pedestrian and Cyclists' use of roads and paths within the Study Area.

Recommended Alternative: Sidewalks will be maintained on roadways which currently feature sidewalks. New sidewalks will be provided on affected roadways that do not currently have sidewalks if there is a demonstrated need for pedestrian accommodation and/or a need to maintain or improve pedestrian connectivity between the neighborhoods affected by the proposed project. All sidewalks will be constructed in

compliance with the Americans with Disabilities Act (ADA) of 1990. The ADA compliant sidewalks will provide curb cuts at all crosswalks and ramps that do not exceed maximum grades. The goal is to remove and replace all physical barriers within the public right-of-way that inhibit people with disabilities from accessing programs, services, activities and public accommodations.

MDOT has incorporated several enhancements into the design of the Recommended Alternative which improve non-motorized access and circulation between the city of Port Huron and Port Huron Township, and connectivity with other existing non-motorized systems. These enhancements were developed as part of continued coordination efforts with the city of Port Huron, Port Huron Township, and St. Clair County.

MDOT will construct a 14-foot non-motorized crossing on the south side of the newly expanded I-94/I-69 Black River Bridge. This will be a multi-directional facility and will be designed to accommodate both pedestrians and cyclists. The path will connect with the existing sidewalks along Water Street and the newly constructed non-motorized facilities along relocated Pine Grove Avenue. All replacement facilities would meet Americans with Disabilities Act Guidelines.

For pedestrian accessibility at the roundabout, a signalized pedestrian crossing could possibly be provided a few car lengths from the roundabout. The crossing would provide a signal to stop traffic on demand for pedestrians by pushing a crossing button which would activate the signal. The exact configuration of the intersections and pedestrian crossing will be determined during the design phase of the project.

3.5.6 How Will MDOT and FHWA Reduce and Compensate for the Neighborhood and Community Impacts?

MDOT and FHWA continue to work with the community on measures to mitigate or compensate for the negative effects of the project throughout the environmental clearance process and the design and construction of a new plaza. **Chapter 5 Mitigation** discusses the ways that MDOT will mitigate the negative effects of the project.

What is the Americans with Disabilities Act (ADA) supposed to do?

It is intended to make America more accessible to people with disabilities. To do so, guidelines are provided on buildings, sidewalks, street crossings, and the like. Curb cuts for wheelchairs and limits to how steep sidewalks can be are two examples.

3.6 Environmental Justice

This section discusses changes that have occurred since the release of the DEIS regarding the potential adverse and excessive environmental and human health impacts the proposed project may have on low-income and minority communities. A full discussion on Environmental Justice can be found in **Chapter 3 Section 3.3** of the **DEIS**.

3.6.1 What is Environmental Justice?

Title VI of the 1964 Civil Rights Act:

Prohibits discrimination on the basis of race, color, sex and national origin in programs and activities receiving federal financial assistance.

What Does Executive Order 12898 Cover?

The Order states:
“...each federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low income populations.”

Environmental Justice is an attempt to identify, address, and avoid disproportionately high and adverse human health or environmental impacts that projects funded by the federal government may have on minority and low income populations. The current Environmental Justice analysis requirements were created through Executive Order 12898 by the President of the United States in 1994. The President directed all federal agencies to make Environmental Justice part of their missions and to identify and address the effects of their programs, policies and activities on minority and low-income populations. Environmental Justice built on Title VI of the 1964 Civil Rights Act which prohibits discrimination on the basis of race, color, sex, and national origin in programs and activities receiving federal financial assistance. Environmental Justice is a policy that has three major parts: Environmental Justice policy has three major parts:

- Avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects of the project, on minority populations and low-income populations
- Ensure the full and fair participation by all potentially affected communities in the transportation decision making process
- Ensure minority and low-income populations receive their equal share of the benefits from the project

The Environmental Justice analysis was performed using a set of guidelines provided by the Federal Highway Administration (FHWA) and in consultation with MDOT officials responsible for Environmental Justice issues. The Study Team tailored the general principles and procedures of

the guidelines to the unique character of the community and the alternatives being studied.

3.6.2 Groups Included in Environmental Justice/Title VI Analysis

At the beginning of the NEPA process, the Environmental Justice analysis begins by determining if a minority population group or low-income population group is present in the Study Area. In order to determine if a minority population group or low-income population group is present in the Study Area, MDOT reviewed census tracts from the 2000 Census. MDOT also reached out to community leaders and groups, tribal governments, and local officials by conducting public information meetings and workshops (**Section 6** of this **FEIS**), which helped identify Environmental Justice population groups in the Study Area. The community outreach also helped to identify individuals who may be limited in English proficiency (LEP) in the Study Area. Based on the information provided by the census data (2000) and outreach efforts it was determined that there was not a need for translation services for the Blue Water Bridge Plaza Study.

3.6.3 What are the Effects of Each Alternative on Environmental Justice Populations?

Potential Environmental Justice effects are defined as the unavoidable negative effects of the project that would be mostly experienced by minority and low-income populations or are higher than the negative effects that would be suffered by non-minority and/or non-low-income populations. The analysis has determined that there are no disproportionately high and adverse human health or environmental impacts on minorities and/or low-income populations by the No-Build or the Recommended Alternative.

All negative impacts to environmental resources, such as air quality, noise, and public services will be avoided, minimized, or rectified to the extent possible. MDOT will provide purchasing and relocation assistance and advisory services for any member of the community whose property was needed for the project. MDOT will inform individuals, businesses and

non-profit organizations of the impacts of the project on their property.

All residents of the Study Area including minorities and lower income groups will benefit from positive impacts of a potential new Blue Water Bridge Plaza. Potential beneficial impacts include relief of local traffic congestion, increased border safety and security, job creation, and improved economic conditions for businesses that depend on trade.

The Recommended Alternative will not have a disproportionately high and adverse effect on minority and low-income population groups. Approximately 9.4 percent of the residents surrounding the existing Blue Water Bridge Plaza would be considered part of a minority group. This percentage is smaller than the minority population percentage for the entire city of Port Huron, which is 15.5 percent. The minority group with the greatest representation of its total population located within the blocks affected by the Recommended Alternative is American Indian/Alaskan Natives peoples. Approximately five percent (12 total residents) of Port Huron's total American Indian/Alaskan Native population live in the impacted blocks.

The Recommended Alternative will affect Environmental Justice populations in a similar manner to the general population. All of the impacts for the Recommended Alternative discussed in **Chapter 3 The Environment: What's There Now and Project Effects** will affect various segments of the general population based on their proximity to the project and their use of the existing roads and border crossing in the Study Area. The Recommended Alternative would require the acquisition of 129 acres of land in order to accommodate the new plaza, local road configuration and the new welcome center. The 125 residences that will be relocated for the Recommended Alternative include some minority, low-income, and elderly households. The potential relocation of 30 businesses currently operating in the Study Area will also affect low-income, minority, and elderly households. The relocation effects of the Recommended Alternative are further discussed in **Section 3.7 Relocations**.

Neighborhood cohesion in the blocks surrounding the existing plaza would be divided as a result of plaza expansion at the existing location. Several local businesses will be relocated. This could present a challenge to the local low-income population to find sufficient alternatives to these departed businesses if comparable types of businesses are not located in the remaining commercial area as they may be limited in personal transportation and public transit service to outlying areas. As discussed in **Section 3.5.5**, non-motorized access will be provided to facilitate access and movement around the plaza. Additionally, the local street network of Hancock, 10th Avenue and relocated Pine Grove Avenue will provide sufficient mobility options for these neighborhoods.

Neighborhood effects created by the Recommended Alternative will be the same for all persons regardless of race, income, or age. Environmental Justice populations will experience the same changes in access, emergency service routes and minor transit re-routing. Changes in noise levels, as discussed in **Section 3.4 Noise**, will also affect low income, minority, and elderly households. The aesthetic and visual impacts of expanded plaza facilities, discussed in **Section 3.9 Aesthetic and Visual Impacts**, will affect Environmental Justice populations in the same manner as the general population. The Recommended Alternative will also result in the reduction of the local tax base which will be felt by all Port Huron and Port Huron Township residents regardless of income, race, or age.

Environmental Justice populations and border crossers will share in the potential benefits of the Recommended Alternative. There will be traffic congestion relief resulting in reduced travel times for border crossings and travel on local roads. As discussed in **Section 3.4 Economics** of the **DEIS**, excess border congestion is costly to local, state, and national economies. Border crossing improvements may lead to more jobs and reduced transportation costs, with widespread benefits to the general population including minorities and low-income persons in the United States and Canada. These groups will also share in the benefits of improved border security.

3.7 Relocations

Residential relocations are homes that must be purchased including single family homes, duplexes, apartments, and condominiums. Commercial relocations are businesses that must be purchased including stores, offices and restaurants. This section will discuss any changes that have occurred since the release of the DEIS and summarize the key impacts. For a complete discussion on the relocation analysis, see **Section 3.6 Relocations** of the **DEIS**.

No-Build Alternative: The No-Build Alternative would not require any relocations.

Recommended Alternative: Through the development of this FEIS, MDOT has developed the Recommended Alternative in a manner which reflects a “worst-case” scenario when it comes to affected properties. This approach means that if a parcel is significantly impacted, MDOT has assumed a total acquisition will be required.

During the design phase, MDOT will further refine the specific property requirements associated with the Recommended Alternative along both the corridor and the plaza. As a result there is a possibility that relocations identified within this FEIS may be reduced. For example, if during the design phase it is determined that only a small corner of a property is required, then it is likely not to require relocation.

The DEIS stated that the Preferred Alternative would displace 129 residences and 30 businesses. As a result of feedback MDOT received regarding the size of the plaza and the number of relocations, the plaza footprint was reduced. See **Section 2.2** of this **FEIS** for a discussion on the process used to determine the reduced plaza size. By reducing the plaza size residences and businesses were no longer needed from the area directly south of the new plaza and the displacement numbers were reduced.

After further social, economic, and environmental impact analysis, the Blue Water Bridge Study Team determined these remaining 17 residences and four businesses if left to remain in their current location would be:

- **Segregated** from other existing land uses and would result in the creation of its own defined area;
- **Separated** from adjacent properties and would result in the creation of a non-complimentary mixed land use; and
- **Isolated** from other residences and business in an area that becomes difficult to accommodate both vehicular and pedestrian movements.

Additionally the areas south of the plaza (Mansfield, Scott Avenue and relocated Pine Grove Avenue properties) will be utilized for maintenance of traffic and construction staging purposes during the construction phases. This area may also be utilized for storm water detention areas. A decision of whether this property will be utilized for storm water drainage purposes will be made during the design phase of the project.

Table 3.7.1 Relocation Impacts by Community

Alternatives/ Community		Residential			Business				Community Facilities		
		Single-Family	Multi-Family	Residential Total	Service	Retail	Business Total	Vacant Sites for Sale/Rent	Churches	Other Community Facilities	Community Facilities Total
Recommended Alternative	City of Port Huron	98	24	122	15	13	28	6	1	-	1
	Port Huron Township	3	-	3	1	1	2	-	-	-	-
	Alternative Total	101	24	125	16	14	30	6	1	-	1

The Study Team determined the same case cannot be made for the 4 residences along Riverside Drive. These properties remain shown as no longer relocations within this FEIS (see **Figure 2.3.1** and **Table 3.7.1**).

As a result of the changes made to the plaza footprint and the Preferred Alternative the Recommended Alternative will now require 125 residential, 30 business, and one church relocation(s).

MDOT will compensate homeowners that are relocated and assist with the relocation process. All relocation assistance would be provided in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Resources will be made available without discrimination to all residential and business owners who are relocated. Under the requirements of this Act no relocations can occur until it is shown that comparable housing is available in the area for relocation purposes. Comparable replacement housing must meet decent, safe and sanitary requirements in accordance with Federal Law. Typically, community facilities that are relocated by a project require rebuilding rather than relocation. Every effort will be made, through relocation assistance, to assure property owner rights are upheld in the highest professional means possible.

The relocation estimates are based on a worst-case scenario of acquiring all structures on parcels whose land is required for the Recommended Alternative. Most of the homes that may be relocated are owner occupied. Some multi-unit rental property relocations are required; a few of the relocations are single family home rentals. There is a multi-unit condominium property whose residents will need to be relocated for the Recommended Alternative. Analysis of census data and community information indicates that the residential displacements would include a small percentage of minority and low-income households. Impacts to minority and low-income households are discussed further in **Section 3.6 Environmental Justice**.

The business relocations for the Recommended Alternative would also require the relocation of a number of jobs. An estimate of the jobs connected with the business relocations is presented in **Table 3.7.2**. These estimates were made through contacting the businesses that would be potentially relocated. In instances where an employment count for a business was unavailable, an estimate was made based on similar businesses in the Study Area.

The Recommended Alternative will require relocation of the commercial businesses in the Blue Water Gateway Area, Pine Grove Avenue mixed-use corridor. Businesses to be relocated are small to medium sized establishments (generally 25 people or fewer). The retail/service businesses should be able to find comparable new locations relatively easily. Few long-term job losses are expected with this alternative as it relocates businesses that are not highly dependent on their current locations. Approximately 75 percent of the businesses relocated by this alternative own their property.

Table 3.7.2 Estimated Job Relocations*

Alternative	Number of Estimated Commercial/ Industrial Relocations	Estimated Total Jobs Relocated
Recommended Alternative	30	370
* These estimates do not include the employees who work on the plaza and would be relocated from the city of Port Huron to Port Huron Township under the Township Alternative. The impact of those job relocations is discussed in Section 3.2 Economics .		

The Recommended Alternative requires relocations along Hancock Street, Pine Grove Avenue, 10th Avenue, 11th Avenue, 12th Avenue, Church Street, Elmwood Street, Harker Street, Mansfield Street, Scott Avenue, Riverside Drive, Water Street, and Maywood Drive. The overall exhibits of the Recommended Alternative, **Figure 2.3.1** shows the relocations for this alternative.

Availability of Replacement Property: Replacement property should be of a similar size and pricing of the original home. No relocations can occur until it is shown that comparable housing is available. Comparable replacement housing must meet decent, safe, and sanitary requirements in accordance with Federal law. Port Huron has a wide variety of neighborhoods with schools and parks including homes with a range of values that should provide adequate housing for those that are required to relocate. See the Conceptual Relocation Plan in **Appendix A** for more information on replacement property potential in the area.

3.8 Public Safety and Security

This section summarizes impacts to fire, law enforcement, emergency medical, and plaza security services for the Blue Water Bridge Plaza Study Area. As owners of the plaza, MDOT has an agreement with the city of Port Huron to provide first responder police, fire, ambulance, and other related emergency services for the plaza and bridge. There is also a reciprocal agreement between MDOT and Canadian officials to provide back-up emergency services, if needed. For a full discussion on the Public Safety and Security analysis see **Section 3.5** of the **DEIS**.

3.8.1 General Design Considerations and Criteria

Potential security threats to the border crossing include, but are not limited to:

- Vehicular crashes
- Emergency medical incidents
- Hazardous/Flammable material spills
- Breach of the perimeter at the plaza or corridor
- Criminal or terrorist attack at the plaza, or attempted entry by an individual with hostile intent

The Recommended Alternative will include the following security and emergency design elements:

- Provide a controlled gate access on the north side of the proposed plaza
- Improve the internal access to all areas of the plaza
- Provide a dedicated emergency access lane along the plaza entrance road off of Pine Grove Avenue
- Consider locating a first-responder station at or adjacent to the proposed plaza

Customs and Border Protection (CBP) also recommended the following security measures:

- Provide an eight-foot high perimeter barrier that would effectively keep people and vehicles out of the secure plaza area

- Locate facilities to allow visual observation of traffic and pedestrian movements on the plaza

3.8.2 Effects of the Alternatives on Public Safety and Security

No-Build Alternative: The No-Build Alternative will not change the current access points for emergency service providers. The main impact of this alternative on emergency services will be delays due to congestion in responding to emergency calls on the plaza or in the vicinity of the plaza. This is due to projected traffic backups on the Black River Bridge and along major north-south streets such as Pine Grove Avenue and the M-25 connector.

The No-Build Alternative does not include any specific security improvements to the existing plaza. CBP has discussed the likelihood of some security improvements over time, as funding permits. These improvements would not include the same security features as the Recommended Alternative.

Recommended Alternative: Security measures proposed for the Recommended Alternative must take into consideration the threat risk, cost, and effectiveness. A reasonable combination of measures should be provided to deter a reasonable threat.

The Recommended Alternative provides two controlled access points for emergency service personnel. One access will occur on the north side of the plaza from Hancock Street, and the other on the south side of the plaza via the relocated Pine Grove Avenue. Emergency service access to the plaza from the west will be similar to the No-Build Alternative via the I-94/I-69 approach. Most of the plaza would be at ground level.

The following security design elements are proposed for the Recommended Alternative:

1. Eight-foot high perimeter barriers at strategic locations along the perimeter of the plaza. The use of landscaping, bollards, planters, grading, etc. can soften the visual impact of the perimeter barriers. The design details for the

perimeter barrier will be addressed at the final design phase of the project.

2. Controlled access points into the secure plaza located at the north and south boundaries of the plaza, for emergency service personnel.

The Recommended Alternative would have little or no effect on emergency service response times to and from the plaza, with response times similar to current response times.

There are two major north-south roadways through this area, 10th Avenue and Pine Grove Avenue. This alternative would relocate Pine Grove Avenue to the west from its intersection with 10th Avenue and tie into the M-25 Connector. This will eliminate the portion of Pine Grove Avenue that runs under the plaza. Emergency service responders will be able to access the neighborhoods and businesses north and south of the plaza via 10th Avenue and Pine Grove Avenue.

Emergency service along I-94/I-69 would be improved with better separation of local and plaza traffic.

Currently, the Blue Water Bridge Plaza is a major hazardous materials crossing and will continue to be. The existing plaza has an emergency spill containment area. This feature will also be incorporated into the Recommended Alternative.

MDOT currently provides an annual payment to the city of Port Huron of \$200,000 for emergency response services on the plaza. MDOT also pays Port Huron Township \$5,400 annually as a secondary emergency responder on the plaza.

In order to address the possibility of increased risk associated with future traffic increases coming across the expanded plaza, MDOT commits to annually reimburse the city of Port Huron \$300,000 for emergency services provided on the expanded plaza (assuming the city remains the primary first responder). MDOT will index this payment to the Consumer Price Index or a similar index for a period of ten years to account for inflammatory factors. MDOT also will commit to annually reimburse Port Huron Township \$8,500 for emergency services provided on the expanded plaza as a

secondary emergency responder (assuming the Township remains the secondary emergency responder). An agreement will be developed between each of these agencies and the agreement shall be reanalyzed after ten years to address future discrepancies or changes between service calls and emergency service payments.

3.9 Aesthetic and Visual Impacts

The Federal Highway Administration's (FHWA) Technical Advisory (TA) T6640.8A dictates that whenever a potential for visual impacts exists from a proposed transportation project, the environmental study should identify the potential visual impacts to the adjacent land uses as well as measures to avoid, minimize, or mitigate these potential visual impacts.

One way to mitigate visual impacts, is by using the Context Sensitive Solutions (CSS) process. The CSS process focuses on how to develop a facility that fits its physical setting meanwhile, preserving scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility.

The CSS and visual assessment process consists of four study components. These include:

- Determining the existing Landscape Viewshed
- Analyzing the Landscape Character and Experience
- Predicting Baseline Impacts
- Identifying Mitigation Options

The visual assessment conducted for the DEIS provides an analysis of the landscape character for the Study Area. It was used to determine the type and degree of visual impact for various viewers, such as the interstate/plaza user, the recreational tourist and the local resident. This section will summarize the aesthetic and visual impacts and any changes that have occurred since the release of the DEIS.

Although significant preliminary engineering has occurred to develop the Recommended Alternative, the exact appearance of the alternative is still considered conceptual.

3.9.1 What does the Existing Study Area Look Like?

There are a few key land uses within the Study Area that contribute to the visual identity of the area. The most significant of these are the Black River, adjacent marinas and parks. A public campground, owned and operated by Port Huron Township, is located on the north side of the freeway west of the Water Street interchange. Residences are an important land use near the existing plaza. Their view includes an elevated plaza approximately 24-feet high with associated buildings and traffic.

3.9.2 What are the Visual and Aesthetic Effects of a New Plaza on the Surrounding Area?

No-Build Alternative: Under the No-Build Alternative, the existing plaza would remain as is and the visual landscape would not be changed from its current situation.

Recommended Alternative: The exact appearance of the Recommended Alternative is only conceptual at this time. The ultimate appearance of the facility will have a dramatic effect on the visual quality of the area. Through meetings held with the city of Port Huron and St. Clair County officials, MDOT has committed to working with its federal, state and local stakeholders to develop an Aesthetic Design Guide (ADG) for the project.

The ADG will identify the proposed aesthetic treatments to be considered during the design and construction phases and will provide an overall design direction for both the corridor and plaza project areas to assure an overall continuity is achieved between these two work elements. The ADG will define an overall theme as well as specific community characteristics that can be incorporated in the corridor and plaza architectural elements to assure these infrastructure improvements reflect the Blue Water Community. See **Section 5.4** of this **FEIS** for more Aesthetic Design Guide details.

3.9.3 What are Potential Light Pollution Effects?

The effects of artificial lighting provided for nighttime activities at the plaza facility and project roadways are a

notable concern raised by stakeholders on this project. The provision of artificial lighting needs to balance the security needed for visual recognition of persons, goods and vehicles in the plaza with the environmental and quality-of-life impacts that come from the lighting at night.

The General Services Administration (GSA) guide notes:

- Placement of lights should consider glare and contrast to allow for better night vision. Illumination must not allow light to “trespass” off of the building property. GSA recommends a minimum 80-degree cutoff of light fixtures to achieve this.
- Lighting levels need to consider surveillance technology to avoid areas that are too bright or are in shadows. Lower levels of light in specific locations may be desirable for safety reasons or to accommodate certain types of camera technology.

Port Huron Township has its own light guidelines as part of its zoning ordinance:

- Any operation or activity which produces glare shall be conducted so that direct and indirect illumination from the source of light does not exceed one-half (1/2) of one (1) footcandle when measured at any point along the property line of the site on which the operation is located. The relocated Welcome Center will need to conform to these requirements.

No-Build Alternative: The No-Build Alternative already produces substantial illumination in the Study Area and it is presumed that the lighting would remain as it is today, with no new areas of effect or changes in the brightness or desired/undesired light levels that currently impact the Study Area.

Recommended Alternative: The Recommended Alternative may have a substantial impact on remaining adjoining properties throughout the Study Area, as discussed in greater detail in **Section 3.7 Relocations**. The impacted areas include businesses and residential properties on 10th Avenue and Hancock as well as relocated Pine Grove Avenue. However, one benefit from the relocations associated with Recommended Alternative is that there would be a greater

buffer distance between the plaza and nearby residential properties on the south side, along Scott Avenue. As part of the development of the Aesthetic Design Guide, directional lighting at the plaza and creative berm concepts and along the highway corridor and the relocated Welcome Center will be evaluated.

3.10 Groundwater, Drainage, and Water Quality

As discussed in **Section 3.11** of the **DEIS**, both the No-Build Alternative and the Recommend Alternative would have no impacts on groundwater resources and minimal impacts to surface water quality. Stormwater from the proposed plaza would discharge into Port Huron's storm/sewer system or through vegetated controls toward the Black River. The proposed ditch flow patterns for run-off in the areas west of the Water Street interchange will incorporate a design to match the existing conditions where feasible, flowing towards Stocks Creek.



Stocks Creek at the Black River

In accordance with state and federal laws, the stormwater detention basins construction will control the rate of water discharged to match the existing discharge quantities. MDOT will coordinate with the city of Port Huron, MDEQ and St. Clair County during the design phase to identify and design the appropriate stormwater detention facilities.

3.11 Floodplains

The floodplain is divided into two parts, the floodway which carries most of the flow during a flood event, and the floodway fringe which is an area of very slow moving water or "slack water." The floodway is the high hazard area during times of flooding. **Section 3.12** of the **DEIS** contains a complete discussion of floodplains and the project's impacts on them.

3.11.1 Floodplains in the Study Area

The Study Area contains 64.6 acres of land within the 100-year floodplains of the Black River and Stocks Creek.

What is a 100-year flood?

A flood which has a one percent chance of occurring any given year.

The Black River floodplain located within the Study Area contains some scattered low-quality wetlands and habitat, but those wetlands are mostly valued for stormwater control and pollution filters. On the east side of the Black River there is urban development and a local roadway (Riverside Drive) located adjacent to the river. On the west side of the river, south of the freeway, there is a private marina, while on the north side of the freeway there is a local park. The parkland is mostly located within the floodplain and provides marginal wildlife habitat and limited plant diversity. There are no migratory bird-nesting sites on the parkland.

Stocks Creek is a tributary of the Black River and is not navigable. Stocks Creek at the I-94/I-69 crossing west of the Lapeer connector has an associated floodplain and an upstream drainage area of 6.9 square miles. At this location, the Stocks Creek floodplain is mostly low-lying emergent wetlands.

3.11.2 Impacted Floodplains

No-Build Alternative: The No-Build Alternative would have no effects on the 100-year floodplain.

Recommended Alternative: Efforts have been made to minimize impacts to the floodplains and any impact to the 100-year floodplain will be offset by providing additional compensatory storage for flood waters.

The proposed Black River Bridge improvements will be at or above the existing elevations (which are at least 8 feet above the 100-year flood elevation) and, therefore, will be protected from water flooding over the roadway/bridge in the event of a 100-year flood. The new bridge design will also increase the opening under the bridge helping to offset any proposed fill in the 100-year floodplain.

As a result, there will be no impacts on natural and beneficial floodplain values, there will be no change in flood risks, and there will be no increase in potential for interruption or termination of emergency service or emergency evacuation routes.

The Recommended Alternative over the Black River: The Recommended Alternative requires the replacement of the Black River Bridge. The existing bridge is a 10-span, 766 feet long, 64 feet wide, steel I-beam structure built in 1950. The proposed bridge will be a 12-span, 1,369 feet long, 206 to 254 feet wide, precast concrete I-beam structure. Due to clearance issues, box beams will be used over Riverside Drive. The waterway piers will remain in their current location based on direction received by the U.S. Coast Guard.

This widening will require the placement of fill material within the 100-year floodplain west of the Black River Bridge along both sides of I-94/I-69. Lengthening the bridge over the Black River will provide compensatory storage to ensure that the new bridge will not impact the 100-year floodplain elevations. Fill for the longer bridge will be required at the Water Street ramp locations, which will be above the 100-year floodplain elevations.

Floodplain analysis for the Black River indicates that the proposed water surface elevation immediately upstream would be 0.01 feet lower than the existing for the 100-year storm event. Immediately downstream of the structure the existing and proposed water surface elevations would be the same with no adverse impacts.

The Recommended Alternative over Stocks Creek: Stocks Creek runs from south to north and crosses under I-94/I-69 perpendicularly through 210-foot long, twin 10.5x6 foot elliptical concrete culverts. The new Stocks Creek structure will be a 214 feet long, 30 feet wide, 10 feet tall, open bottom concrete culvert. A hydraulic analysis has concluded that the proposed single-span structure would not create an adverse effect on the hydraulic capacity and efficiency of the Stocks Creek crossing.

3.12 Wetlands

What is Wetland Delineation?

The process used to determine the size and type of a wetland.

An extensive study of the potential effects to wetlands in the Study Area was completed for the DEIS (see **DEIS Section 3.13**). Wetland delineations and assessments were conducted in the Study Area to identify locations and sizes of wetlands, assess the functions associated with each wetland, and identify

the potential wetland impacts of each alternative. The majority of the wetlands within the Study Area are located west of Water Street along I-94/I-69. It was determined that there would be no impact to any wetland under the No-Build Alternative.

The majority of the wetlands within the Study Area are located west of Water Street along I-94/I-69 (**Figure E.26** in **Appendix E** of the **DEIS**). The eastern portion of the Study Area is more urban with wetlands located primarily along the Black River. Invasive plant species dominate these wetlands and contain significant amounts of garbage and debris. However, these types of wetlands, adjacent to rivers, lakes and streams, can provide higher water quality functions, erosion control, and wildlife habitat.

Two wetland areas adjacent to Stocks Creek represent the highest quality and largest wetlands within the Study Area. These wetlands are located on the north and south side of I-94/I-69, just west of the Lapeer connector. Both of the wetlands border Stocks Creek and provide flood storage, water filtration, nutrient uptake and erosion control functions, in addition to wildlife habitat. It is likely that these two wetlands were historically one complete wetland complex that was fragmented at the time I-94/I-69 was initially constructed.

3.12.1 How Many Acres of Wetlands will the Recommended Alternative Impact?

As stated in the DEIS the proposed improvements for the Recommended Alternative would impact a total of 3.24 acres of emergent, scrub-shrub, and open water wetlands, and 1.12 acres of forested wetlands for a total of 4.36 acres of wetland impacts. These wetlands have relative low value, function, and floristic significance. **Chapter 5, Mitigation** discusses measures to offset potential wetland impacts.

3.13 Plants, Wildlife, and Threatened and Endangered Species

An analysis of plants, wildlife, and threatened and endangered species was conducted for the DEIS (see **DEIS Section 3.14**). It was determined that the Recommended

Alternative would not have significant impacts on plants and wildlife. The analysis found no threatened and endangered species in the Study Area.

3.13.1 What Methods were Used?

What is habitat?

An area that provides an animal or plant with adequate food, water, shelter, and living space.

The identification of plants, wildlife, and threatened and endangered species consisted of record searches and field investigations. Based on information received from the Michigan Department of Natural Resources and the Michigan Natural Features Inventory, the study did identify specific target species and target habitats. Field inspections included a minimum of two qualified biologists visually inspecting all of the Study Area and recording all observations of plant and animal species present.

3.13.2 What does the Existing Environment Look Like?

What are macroinvertebrates?

Macroinvertebrates are invertebrates visible to the naked eye, such as insects, crayfish, and worms. Macroinvertebrate studies provide a good environmental indicator of stream health because many species are either tolerant or intolerant of pollution.

Habitat, Wildlife, Threatened and Endangered Species, and Plants: The habitat types located in the Study Area are typical for Southeastern Michigan. Based on field surveys, the plant communities in the Study Area support some animal species found in Southeastern Michigan. Two animal species, the spotted turtle (*Clemmys guttata*) and round hickory-nut mussel (*Obovaria subrotunda*), were identified as having potential to exist within the Study Area but none were found during field investigations.

Fish and Aquatic Biota: Results of Black River surveys indicated poor water quality conditions with degraded habitats and poor macroinvertebrate communities. No spawning occurs within the Study Area, but does occur in upstream reaches, where hard, gravel and cobble bottom substrates are present. The habitat quality associated with Stocks Creek is good to excellent. However, fish and macroinvertebrate communities are indicative of a stream with lower water quality.

3.13.3 Will the Project Impact any Plants, Wildlife, or Threatened and Endangered Species?

No-Build Alternative: The No-Build Alternative would have little or no impact on the plants, wildlife or threatened and endangered species within the Study Area.

Recommended Alternative: The Recommended Alternative would have the following impacts on plants, wildlife and threatened and endangered species within the Study Area.

Wildlife: Because the impacted areas of the Recommended Alternative are near existing roads and developed areas, the plant communities that would face elimination are not suitable wildlife habitat. Wildlife species that are common in the surrounding area are tolerant of noise and visual disturbances, and may relocate to similar adjacent habitat.

Threatened and Endangered Species: No state or federally listed threatened and endangered animal species appear to exist within the Study Area.

Plants: Impacts are not expected to be major with the Recommended Alternative. No unique or special plant communities exist within the Study Area and any species that would be affected are common to urbanized areas in the vicinity of the Study Area.

Fish and Aquatic Biota: Overall impacts to the fish and aquatic biota within the Black River and Stocks Creek should be minimal.

3.14 Potential Contaminated Sites

The Study Team performed two contaminated site surveys of the areas surrounding the existing Blue Water Bridge Plaza. The purpose of these surveys was to locate and identify potential contaminated sites within or near to the potential areas of construction. Such sites would contain Recognized Environmental Conditions (RECs). For a complete discussion see **Section 3.16** of the **DEIS**.

The contaminated sites search included a review of regulatory databases on known contaminated sites, a review of the history of land uses in the area, a walkover, and discussions with the companies that provide power, water, and sewer services.

A total of 20 RECs were identified during the assessment of existing conditions. The No-Build Alternative would not

Recognized Environmental Conditions (RECs)

The presence of or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or material threat of a release of any hazardous substances or petroleum products.

affect any of these RECs. Eighteen of these sites could be affected by construction as part of the reconstruction of the existing plaza under the Recommended Alternative. Impact to two sites would occur by reconstruction of the Water Street interchange.

A methane collection system is present and impacts to the contamination sites will be further addressed in the design phase.

Chapter 5, Mitigation, discusses measures necessary for potential contaminated sites.

3.15 Cultural Resources

Since the publication of the DEIS in August of 2007, the layout of the Recommended Alternative has been changed to address responses to the document. **Section 3.15** of the **DEIS** fully discusses impacts to cultural resources for the Blue Water Bridge Plaza Study. The DEIS stated that the Recommended Alternative would acquire the block on which the E.C. Williams House resides. This remains true, although the proposed plaza layout has been changed. The E.C. Williams house is eligible for the National Register of Historic Places and as a result is protected under Section 106 and Section 4(f).

No-Build Alternative: The No-Build Alternative will have no effect on the E.C. Williams House.

Recommended Alternative: The Recommended Alternative would directly affect the E.C. Williams House property. Currently, the E.C. Williams House is more than a full block away from the existing bridge plaza. The Recommended Alternative would acquire the block that buffers the house from the existing plaza and the block on which the E.C. Williams House resides. The northern and eastern boundaries of the plaza will remain Hancock Street and 10th Avenue. The houses and businesses located on the south side of Hancock Street, on the north side of Church Street, and on the west side of 10th Avenue would be acquired and the block would be converted to both green space and visitor parking for those interested in signing up for the FAST and NEXUS programs.

What are Cultural Resources?

Any historical or archaeological resource, regardless of significance



Front View E.C. Williams House



Side View E.C. Williams House

These activities would take place in a space located in the commercial secondary building (shown in **Figure 3.15.1**).

Based on the direct impact to the house, MDOT has received concurrence from the State Historic Preservation Office (SHPO) on March 15, 2007 that the Recommended Alternative will adversely affect this property. See **Chapter 4.0 Section 4(f) and 6(f) Evaluation** and **Chapter 5.0 Mitigation** for more information. The Memorandum of Agreement (MOA) is included in **Appendix B**. MDOT proposes to relocate the E.C. Williams House.

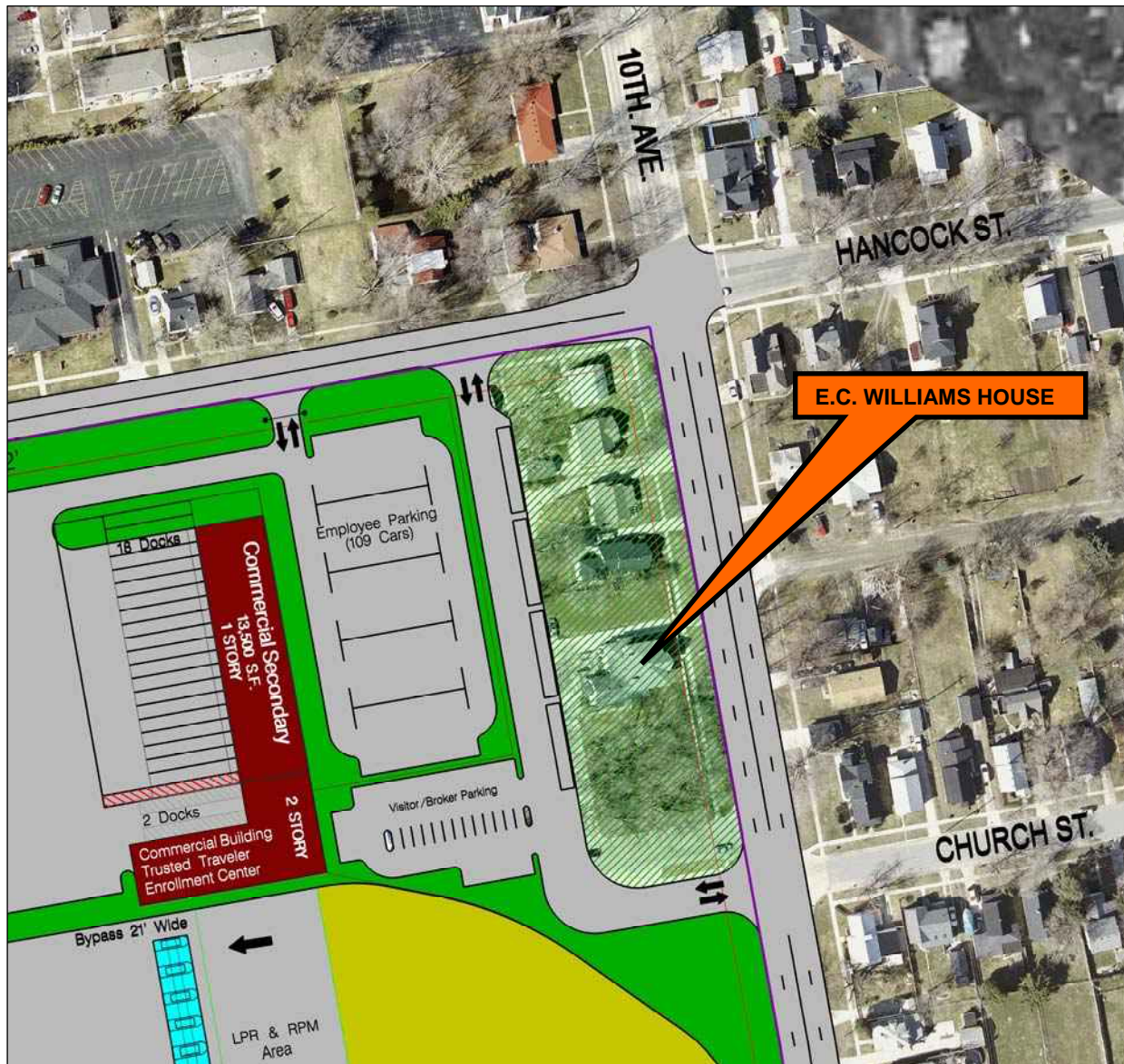


Figure 3.15.1 Recommended Alternative near 10th and Hancock

3.16 Traditional Cultural Properties

Traditional cultural properties are most frequently associated with Native North American sacred places. They are defined as being eligible for listing on the National Register because of the association with the traditional practices or beliefs of a living community. Those beliefs are rooted in that community's history. They are important to maintaining the continuing cultural identity in that community.

Early coordination letters were sent to the 12 federally recognized Tribes of Michigan. No traditional cultural properties, sacred sites or other significant properties were located within the area of potential effect by the Study Team or any of the Tribes of Michigan. However, in the event of accidental discovery of Native American cultural properties during construction, Tribes of Michigan will be contacted for consultation in accordance with the appropriate federal and state laws, rules and regulations regarding such finds.

An unanticipated finds plan will be developed to provide detailed procedures to deal with significant historic resources which may be identified during project implementation. This plan will establish procedures to evaluate and treat these resources. The procedures include stopping work, examining findings, determining eligibility and documenting results.

3.17 Construction Impacts

Construction mitigation contained within this section is a commitment that MDOT must follow during the implementation phases of this project. The local office responsible for construction oversight, schedule inquiries, and project complaints will be the Port Huron Transportation Service Center (TSC).

3.17.1 What are the Construction Impacts of the Alternatives?

No-Build Alternative: The No-Build Alternative would create construction noise and vibration during routine maintenance of existing roadways and the plaza. The No-Build Alternative would not affect water, sanitary sewer, gas, telephone, or



MDOT will develop plans to keep traffic moving during construction.

electrical transmission lines other than during temporary maintenance activities.

Recommended Alternative: The Recommended Alternative would have temporary and short-term impacts on plaza users and the local community during construction. MDOT and FHWA plan to construct the project in phases. This will reduce the construction related impacts that occur at any one time to smaller parts of the Study Area. Temporary changes to existing travel patterns due to road closures and detours would likely impact traffic on local roads in the vicinity of plaza improvements. While these impacts are unavoidable, reducing the temporary impacts to motorists, pedestrians, and residents would be a key part of the construction staging and plans for traffic flow and detours during construction. Although specific detour routes are unknown at this stage of the study, there should be no lengthy detour routes for the Recommended Alternative. Potential detour routes may vary; however, no two adjacent parallel routes would be closed at the same time.

Traffic Flow Impacts: Temporary delays to existing traffic due to construction will occur on I-94/I-69 and other local roadways under the Recommended Alternative. MDOT and the City recognize the importance of minimizing the traffic impacts to the local community as a result of this project, to the greatest extent possible. MDOT and FHWA will stage construction so that there are no total closures of I-94/I-69. Local roadways may experience some temporary closures. The goals of the Maintenance of Traffic (MOT) plan are to minimize delays, minimize congestion, maintain the required access, and complete the project in a reasonable timeframe.

Below is a summarized list of preliminary planning goals for the project construction staging:

- Provide two lanes of I-94/I-69 traffic in each direction
- All Plaza operations will be maintained throughout construction with the aid of temporary connections
- Minimize Water Street and Lapeer connector ramp closures
- Maintain Water Street traffic over I-94/I-69 throughout construction

- Complete the upgraded Black River Bridge prior to beginning construction on the plaza
- Maintain two lanes of Pine Grove Avenue traffic in each direction
- Maintain access to businesses and minimize delay to thru traffic

Under the Recommended Alternative, traffic interruptions would occur at locations where the new or reconstructed roadway connects with existing roadways and where bridge and interchange improvements are proposed. At bridge locations where the Recommended Alternative passes over existing roadways, temporary lane closures and construction equipment access drives may be required. For bridge replacements at Water Street and the Lapeer connector, temporary road closures and detours may be required until the new bridges are fully open to traffic.

Minimizing delays, congestion, and access restrictions would be a priority during construction. MDOT will make every effort to reach agreement with the City and County Road Commission engineering staffs on final goals and implementation of strategies, prior to the beginning of construction.

MDOT will maintain public awareness throughout the project by providing specific information such as duration and location of detours, lane closures, alternative routes, upcoming activities, and anticipated construction deadlines.

Security and Disruption of Plaza Operations During Construction:

The existing plaza performs an essential role in protecting the national security of the United States. The Recommended Alternative will have some construction-period effects on portions of the existing plaza as it will require the reconstruction of the existing plaza in its current location. Construction will occur in stages to maintain security. In addition, construction staging will also have to work around the existing activities on the site.

MDOT will coordinate actively with Blue Water Bridge Canada and the U.S. Customs and Border Protection to ensure that construction is as minimally disruptive as possible.

Construction Impacts to Businesses and Neighborhoods: The Recommended Alternative will temporarily disrupt access to some local businesses and neighborhoods in the vicinity of the existing plaza and at the Water Street interchange.

Contractors will be required to maintain access to businesses at all times to the extent possible. Contractors will coordinate with business owners continuously throughout the project. In neighborhoods impacted by construction, MDOT and the contractor will coordinate with residents regularly.

As part of the maintenance of traffic (MOT) planning, MDOT will make every effort to minimize access disruptions to local businesses. MDOT will work closely with the city of Port Huron and the St. Clair County Road Commission to finalize these plans prior to the beginning of construction.

Construction Impacts to Emergency Services: The Recommended Alternative will impact emergency vehicle routes due to temporary road closures, detours, and traffic congestion/delays. As part of the MOT planning, MDOT will make every effort to minimize impacts to critical north-south routes and emergency service access.

MDOT will coordinate with emergency service providers prior to the beginning of construction and at the beginning of new phases of construction and maintain communication throughout construction. Adjustments to emergency response plans will be developed based on project activity.

Construction Noise and Vibration Impacts: The noise generated by construction operations and equipment would vary greatly, depending on the equipment type and model, mode and duration of operation, and specific type of work in progress. Individuals living or working near the project can expect general construction noise impacts from demolition, earth moving, construction and paving operations. Since construction will take place in phases, different homes and businesses would be affected by construction noise at different times. Construction could create vibrations that would pose a temporary disturbance to people and animals, and could affect nearby structures. Considering the relatively short-term nature of construction noise and the fact that construction will only

take place from dawn to dusk, impacts should not be substantial.

Section 5.6 of the **DEIS** documents MDOT's best practices for minimizing noise impacts during construction. Construction activities will be limited to dawn to dusk, unless the city/township requests changes to this policy to expedite construction duration periods. Much of the construction under the Recommended Alternative would be located within the boundaries of the existing plaza and along I-94/I-69. While a number of nearby residential and commercial properties would be acquired, there would still be properties close to the plaza that would be impacted by noise and vibrations.

Construction noise would be minimized by requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards, and that all portable equipment be placed away from or shielded from sensitive noise receptors, if at all possible.

Care will be taken to prevent vibration damage to adjacent structures. In areas where construction-related vibration is anticipated, basement surveys would be conducted before construction begins to document any damage caused by highway construction. Contingent upon property owner approval, MDOT in consultation with the selected construction contractor will make an assessment as to which structures will have basement surveys completed. MDOT's contractor will be responsible for the costs associated with the required basement surveys. These surveys will be completed at the on-set of the construction phase.

Construction Water Quality and Resources Impacts:

Construction-related erosion, siltation, and riverbed disturbance may be the short-term construction effects. Temporary increases in sedimentation and turbidity levels of surface waters may occur during construction depending on how close excavated areas are to rivers and how often storms occur.

Proper sediment and erosion control will minimize these impacts. Groundwater is not expected to be impacted because appropriate erosion and sediment control measures will be implemented.



MDOT would use proper sediment and erosion control measures during construction.



Construction activities would have temporary visual impacts.

Construction Air Quality Impacts: The Recommended Alternative would have a temporary air quality impact due to construction equipment pollutants, traffic emissions, and dust from areas where soil is exposed or traveled on by construction equipment. **Section 5.4** of the **DEIS** documents MDOT's best practices for minimizing air pollution and particulate matter during construction.

Disruption of Utility Services: The Recommended Alternative may affect utilities that are adjacent to or crossed by the project. These include: electrical, cable, street lighting, gas pipelines, sewers, watermain, and phone service. Even if utilities do not require permanent relocation or adjustment, service to the project area may experience a temporary interruption during short periods of construction. For the most part, the effects on utilities will go unnoticed.

MDOT and its contractors will coordinate with the utilities and affected communities prior to beginning construction or implementation of new phases. The coordination will be maintained throughout the project.

Visual Impacts from Construction Activities: For residences and businesses located near construction sites, there will be temporary visual impacts associated with construction work, particularly from earthwork operations, storage of materials/equipment, and removal of buildings. To the greatest extent possible, MDOT will require that any construction staging area that abuts a residential neighborhood or active commercial businesses be fenced so that views to the interior of the site are screened.

3.18 Indirect and Cumulative Impacts

An extensive study of the potential indirect and cumulative impacts of the proposed project was completed for the **DEIS** (**Section 3.7**). This section will summarize the indirect and cumulative effects of the Recommended Alternative on land use, traffic patterns, farmland and wetlands, as they have the greatest potential to be affected, indirectly or cumulatively, by the project.

3.18.1 What are the Indirect Impacts?

No-Build Alternative: The No-Build Alternative does not involve any expansion of the existing plaza or improvements along I-94/I-69. There will likely be some plaza changes to improve the operation of the plaza over the long term, but the plaza size would not change.

Under this alternative, traffic backups would likely increase over time along the streets and at intersections near the plaza, which may have an indirect effect on the travel patterns of people living in the vicinity of the plaza and on adjacent land uses.

No indirect effects on farmlands or wetlands are anticipated as a result of the No-Build Alternative.

Overall, the No-Build Alternative would not have a significant indirect impact on land use, traffic patterns, farmland or wetlands.

Recommended Alternative: The relocated Pine Grove Avenue provides new frontage access to existing vacant or underutilized business locations north of Hancock Street. This may be an attractive location for new or relocated businesses, providing some revitalization to the blocks north of the plaza. Most of this area is currently zoned for business use; however, the induced business growth could promote the conversion of more of this area to commercial use provided local zoning was changed to allow it. In addition, new business growth could also occur along 10th Avenue and along Pine Grove Avenue south of the project. This business growth could influence the community to convert the first block of neighboring houses to commercial use as well, provided local zoning was changed to allow it.

The Recommended Alternative may indirectly affect traffic patterns by allowing people the option to take alternate routes, such as the rerouted Pine Grove Avenue or 10th Avenue, around the plaza facility. However, this affect should be minor.



Traffic backup on I-94/I-69



Pine Grove Avenue commercial corridor



Water Street off-ramp

The Recommended Alternative will likely have a positive indirect effect on the Canadian side of the border crossing, in Sarnia, Ontario. By reducing traffic backups and associated law enforcement oversight on Highway 402, stress on Canadian resources, in particular, the Ontario Provincial Police, will also decrease.

The Recommended Alternative may have minor indirect impacts due to reduced access for border crossing traffic at Water Street and increased access between the interstate and Lapeer Road via the enhanced Lapeer connector. These minor changes to the road network are unlikely to cause major changes in development and use or indirect impacts to farmland, wetlands, and other natural resources.

The proposed improvements to I-94/I-69 may cause some motorists heading to Canada to bypass the services currently available at the Water Street interchange. Motorists headed to Canada will be directed into separated lanes that lead directly to the Blue Water Bridge prior to Water Street. This should reduce traffic conflicts between local traffic and border crossers. Border crossing traffic will still have the option to access the Water Street interchange via the lanes for local traffic and could then use Pine Grove Avenue to access the bridge plaza. However, motorists unfamiliar with this particular border crossing would be unaware of this option to access Water Street. There will still be full access to Water Street for local traffic and border crossers coming from Canada in the same manner that exists today. As a result, the indirect effect on development at Water Street would be minor.

The minor traffic pattern changes caused by the Recommended Alternative should have minimal affects on land use patterns and development at the potentially affected interchanges along I-94/I-69. The Recommended Alternative does not increase access to or direct large traffic volume to locations with undeveloped land. As a result of the minor traffic pattern changes, a small number of drivers may switch the location for their gas or meal purchases between the various interchanges in the vicinity of the I-94/I-69 corridor but there is unlikely to be enough change to sustain new businesses or development. No indirect impacts on land uses,

wetlands, farmland, and other natural resources are expected with the Recommended Alternative.

3.18.2 Does the Project have any Transboundary Effects?

The Recommended Alternative will likely have a positive indirect effect on the Canadian side of the border crossing, in Sarnia, Ontario. The alternative may reduce stress on Canadian resources, in particular, the Ontario Provincial Police, by reducing traffic backups and associated law enforcement operations on Highway 402. The Recommended Alternative will also reduce delay for Canadians waiting to enter the United States.

The Recommended Alternative will not affect environmental resources in Canada but could result in reduced localized air quality impacts and use of fuel due to less congestion on the Canadian side of the bridge from cars and trucks waiting to enter the United States.

3.18.3 How did the Study Team Determine if the Recommended Alternative would have Cumulative Effects?

Environmental regulations require the evaluation of the cumulative effects for a proposed action or project. In general, a particular action or group of actions would be included in the cumulative analysis, provided:

- The impacts occur in a common area
- The impacts are similar in nature
- The impacts are long-term

Comprehensive plans for the townships of Port Huron and Fort Gratiot, and the city of Port Huron were reviewed to identify future actions that could have cumulative impacts. Also, the 2030 Long Range Transportation Plan, prepared by the St. Clair County Transportation Study, was reviewed for any major transportation projects that may have cumulative effects.

3.18.4 Are There any Cumulative Effects?

Upon reviewing potential projects to be included in the cumulative analysis, the Study Team determined that the only projects with long-term cumulative effects are the various plaza and related improvements over time.

No-Build Alternative: The No-Build Alternative would not result in a cumulative impact on the community and neighborhoods.

Recommended Alternative: The proposed relocations, in combination with past relocations since 1980 and the proposed relocations due to the I-94/I-69 corridor project would result in a significant cumulative impact. There is also a cumulative impact to the tax base of the city of Port Huron.

3.19 Permanent and Lasting Commitments of Resources

Permanent commitments of resources occur when you convert something like wildlife habitat to a transportation project. Lasting commitments of resources are the money, materials, and labor put into a project. Some of these resources, like materials, could possibly be recycled. Others would be gone forever.

No-Build Alternative: Permanent commitments of the No-Build Alternative include the money, time, and personal hardship related to increasing congestion on the plaza and local roadways and the inability of the current plaza to meet the security and operational needs of Customs and Border Protection. As the plaza deteriorates over time, there would be increasing costs for energy and the time required for business travel and personal driving. As traffic delay and operational inefficiencies increase, air pollution, noise pollution, and crashes would affect the local environment to a greater extent than exists today.

Recommended Alternative: Construction of the Recommended Alternative would utilize considerable amounts of fossil fuels, labor, and construction materials such as cement, stone, and asphalt materials. Such a resource use would be generally

permanent, although it would be possible to retrieve and reuse these resources to a limited extent. Any construction would also require a substantial one-time expenditure of both state and federal funds which are irretrievable.

The commitment of these resources is based on the concept that residents in the local region around the Blue Water Bridge Plaza, the State of Michigan and Province of Ontario, and the United States and Canada will benefit from these improvements.

3.20 The Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

As discussed in the DEIS, the money, labor, and construction materials used to construct the project will be substantial. Based on all of the improvements included in the project, the ultimate benefits should justify the initial costs. These costs and benefits are not limited to the spending of public dollars, but also include hard-to-quantify items such as improved security, improved border processing, economic development benefits, etc.

For this discussion, "short-term" refers to the immediate direct consequences of the project while "long-term" refers to its direct or indirect effects on future generations.

No-Build Alternative: The No-Build Alternative will have fewer short-term uses of the human environment above and beyond existing or planned activities at the plaza. Existing land uses would remain as they are today, and the existing plaza would continue to follow the same long-term trends for processing international border crossings. Over the long term, congestion and delay at the plaza will likely increase as international traffic grows and requirements for Homeland Security measures increase in magnitude and complexity.

Recommended Alternative: In the case of the Recommended Alternative, short term uses of the environment would include:

- Temporary air, noise, water pollution, and visual effects caused by reconstruction of roadways
- Temporary air, noise, water pollution, and visual effects caused by reconstruction of the existing plaza into new uses
- Increased cost to motorists in time and fuel efficiency because of construction delays and detours
- Disturbances to businesses, homes, and institutions because of construction
- Conversion of open space, agricultural land, woodlands, and wetlands to transportation or Homeland Security use
- Relocation of people and businesses, including expenses that would be incurred as these people and businesses are compensated
- Reduction in property tax revenues resulting from relocation of people, businesses, and other land uses
- Use of public funds to build the highway and plaza infrastructure

Under the Recommended Alternative, there will be long-term benefits including:

- An improved level of security and the economic and social benefits that come with the higher security
- Improvements in both domestic and international driver convenience, safety, travel time, and energy use
- Economic development opportunities from improved access and local opportunities for contractors in the region
- Reduction of air pollution and noise due to more efficient processing of vehicles on the plaza

The improvements to the Blue Water Bridge plaza, local roads, and I-94/I-69 are consistent with the long range transportation plans of Southeast Michigan Council of Governments and the Michigan Department of Transportation.

CHAPTER 4

SECTION 4(f) AND 6(f) EVALUATION

The purpose of this chapter of this FEIS is to discuss any adverse impacts on properties that are regulated by Section 4(f) of the Department of Transportation Act of 1966 (as amended) that differ from the Draft Environmental Impact Statement (DEIS). For a full discussion on 4(f) impacts see **Chapter 4** of the DEIS.

The No-Build Alternative would have no effect on Section 4(f) and 6(f) properties within the Study Area.

There are no 6(f) properties affected by the Recommended Alternative.

4.1 Are there any 4(f) Properties located within the Study Area?

There are four 4(f) properties located within or adjacent to the Project Study Area. They include:

- Port Huron Township Park No. 1
- Port Huron Township Park No. 2
- Riverside Park
- E.C. Williams House

Port Huron Township Parks No. 1 and No. 2 are both located adjacent to the north side of I-94/I-69 along Water Street. Township Park No. 1 is located to the east of Water Street and is a day use park. It is approximately 11 acres and includes playground equipment, a picnic area, and in the winter is a popular sledding location. Township Park No. 2 is located on the west side of Water Street and is a 36 acre seasonal RV campground owned and operated by the Township.

What is a Section 4(f) Property?

A Section 4(f) property could be a public park, recreation area, wildlife or waterfowl area, or a historic property such as a house or building.

What is a Section 6(f) Property?

Section 6(f) properties are usually parks that have received any amount of financing from Land and Water Conservation Funds (LWCF).



**Port Huron Township Park
No. 2**

Riverside Park is located along the east bank of the Black River on the north side of I-94/I-69 and includes a boat ramp access to the Black River.

The E.C. Williams House is a historic house located north of the existing plaza on 10th Avenue. The house is currently being used as a dentist's office.

4.2 Are there any Impacts to these Properties?



RV Park in Port Huron Township Park No. 2

Neither Riverside Park nor Port Huron Township Park #2 would be impacted by the proposed project. There would be no effect on the activities, features, and attributes that qualify these resources for protection under Section 4(f) to either of these properties.

Some minor property acquisition is still required from Township Park No. 1 for the construction of the freeway and interchange at Water Street under the Recommended Alternative. This alternative will require a total of 0.34 acre (DEIS indicated 0.30 acre) of land from Township Park No. 1.

The E.C. Williams House would be acquired for the construction of the Recommended Alternative (City West) and would still need to be relocated.

4.3 Port Huron Township Park No. 1

What are the Effects of the Project on the Port Huron Township Park No. 1?



Port Huron Township Park No. 1

Under the Recommended Alternative reconstruction of the I-94/I-69 mainline and Black River Bridge would have a negligible effect on the function of the park, as they would require only a narrow strip of park property (approximately 0.34 acre) along the edge of the property that now borders the interstate off-ramp. Approximately 0.04 acre of temporary right-of-way (DEIS 0.1 acre) will be needed at the entrance to the park to allow for driveway grading and connection to the new Water Street roadway. The DEIS indicated the potential need for stormwater detention (approximately 1.2 acres) within the park property near the Black River for drainage

purposes. However, due to further engineering refinements, stormwater detention is unlikely needed within the park.

MDOT coordinated with Port Huron Township officials and with the Township Parks and Recreation Commission regarding the potential impacts to Township Park No. 1. Meetings were held with the Township Supervisor and Parks and Recreation Commission December 6, 2006 and February 9, 2007. Park exhibits were prepared and presented to the public as part of the public meeting held December 7, 2006 at the Girl Scout building on Water Street.

A letter was received from Port Huron Township April 10, 2007 indicating the following: *“Based on information provided and the representations made by MDOT, the Charter Township of Port Huron believes that the proposed work will involve minor or de minimis use of the Port Huron Township Park No. 1.”* Further, the letter indicated: *“The Chairman of the Charter Township of Port Huron Parks and Recreation Commission has reviewed and agrees with the assessment of the impacts of the proposed project as well as the proposed mitigation.”* A copy of this letter is included in **Appendix D** of the **DEIS**. The Parks and Recreation Commission indicated at the meetings that they were interested in the following mitigation items:

- Potentially returning excess property to the Township Park
- Landscaping the potential drainage easement so that it is an aesthetically pleasing natural area

FHWA has determined that the potential impacts to Port Huron Township Park No. 1 are *de minimis* based on the following:

- 1) The transportation use of the park does not adversely affect the activities, features, and attributes that qualify the park for protection under Section 4(f).
- 2) The Township officials with jurisdiction over the park have been informed of the intent to make the *de minimis* impact finding and have concurred with that finding.
- 3) The public has been afforded an opportunity to review and comment on the effects of the project on the park.

As discussed in the DEIS, the Recommended Alternative will not adversely affect the activities, features and attributes that qualify the resource for protection under Section 4(f).

4.4 E.C. Williams House

4.4.1 What are the Project Impacts on the E.C. Williams House?

The Recommended Alternative will require the full acquisition of the property and relocation of the E.C. Williams House. The proposed relocation area of the E.C. Williams House is an MDOT owned parcel located on Elmwood Street in Port Huron. MDOT has proposed relocating the house from its historic location as a way to preserve the structure. The SHPO has determined that this will constitute an Adverse Effect on the property.

4.4.2 How Will MDOT and FHWA Minimize Harm on the E.C. Williams House?

As noted above MDOT has proposed to relocate the house. SHPO has concurred that relocating the house would be preferred to demolition. In coordination with MDOT dated March 15, 2007, SHPO has requested specific mitigation measures be performed in association with the house relocation. The following change has occurred since the release of the DEIS.

Historic Marker: For the DEIS, SHPO indicated the relocated house should have a new historical marker erected. Subsequently, SHPO has indicated that a marker is not warranted due to the new location for the house.

Memorandum of Agreement (MOA) Status: Pending SHPO and FHWA approval.

5.1 Mitigation and Project Enhancements

This chapter provides a full discussion of proposed mitigation and project enhancement measures developed to minimize the direct and indirect social, economic, and environmental impacts of the Recommended Alternative. Unlike other sections of this condensed FEIS, this chapter describes the mitigation and project enhancements in its entirety, including those sections which remain unchanged from the DEIS. Updates from the DEIS including new mitigation and enhancement measures as well as an explanation of any outstanding mitigation issues are also included in this chapter. Specific mitigation and enhancement measures are included in a Project Mitigation Summary Green Sheet which can be found at the end of this chapter.

What is Mitigation?

Mitigation is defined as the elimination, reduction or control of the negative environmental effects of a project, and includes measures to address any damage to the environment caused by such effects through replacement, restoration, compensation or any other means.

5.2 What is Mitigation?

Federal regulations (40 CFR 1508.20) define mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

The goal of mitigation in this project is to preserve, to the greatest extent possible, existing neighborhoods, land use, and natural resources, while improving transportation and security. Although some negative impacts are unavoidable, the Michigan Department of Transportation (MDOT), through design, environmental, and construction processes, takes precautions to protect as many social and environmental



Wetland Mitigation

systems as possible. Examples of mitigation that will be implemented for this project include wetland replacement, and the relocation of a historic building.

Construction activities that include the mitigation measures described below are contained in the 2003 Michigan Standard Specifications for Construction.

5.2.1 What are Project Enhancements?

Much like mitigation, project enhancements seek to reduce the short and long-term impacts of a project on the host community(ies). While mitigation measures are usually defined by legislative statute or interagency agreements, enhancements are those items that get added to a project that are over and above the mitigation required by law. Enhancement elements are often developed as a response to community input. Enhancements may or not be funded by the Federal Transportation Enhancement Program.

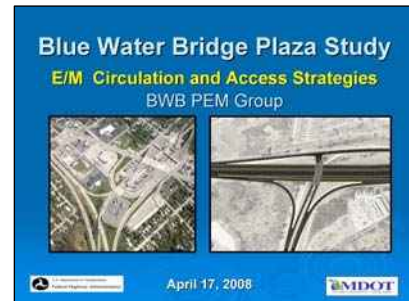
Formation of Blue Water Bridge Project Enhancement and Mitigation Group: For the Blue Water Bridge Plaza Study, an interagency working group was formed to identify project enhancements. This group, called the Project Enhancement and Mitigation Group (PEM), was made up of local, state, and federal officials. Core membership of the PEM Group included staff or representatives from:



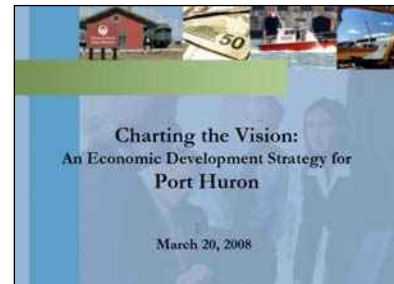
- City of Port Huron
- St. Clair County
- Charter Township of Port Huron
- Bridge Plaza Business and Community Coalition
- Congressional Delegation
- State Elected Official's
- Federal Highway Administration
- General Services Administration
- U.S. Custom and Border Protection
- MDOT

Frequency of Meetings/Meeting Topics: The PEM Group met monthly covering specific enhancement and mitigation topics which were identified as areas of concern through agency and public comments on the DEIS. In total, nine meetings were

held with the PEM Group between February 2008 and November 2008. Topics discussed included economic development, local access and circulation, non-motorized circulation, natural environment, lost tax base, real estate, emergency services, maintenance of traffic/construction staging, aesthetics, and plaza operations. As topics were discussed local subject area experts also attended the PEM Group meetings. For example when local access and circulation was discussed, representatives from the St. Clair County Road Commission participated in that particular meeting. Meeting summaries, and a detailed spreadsheet listing all of the issues discussed and the proposed project enhancements are included in **Appendix C**.



Summary of Agreed Upon Project Enhancements: MDOT commits to adding approximately **\$13.1 million** of project enhancements to the project design. These enhancements have been developed to address the direct and indirect impacts of the project in the areas of economic development, tourism, local circulation and access, emergency response, and non-motorized mobility. MDOT, FHWA, GSA and CBP all believe these enhancements will help reduce the overall impact of the project. MDOT believes these enhancements can help align Port Huron's existing assets, which will allow the community to leverage the long-term economic benefits this large-scale project can generate.



5.3 How are Right-Of-Way Acquisitions and Relocation Impacts Addressed?

Through the development of this FEIS, MDOT has developed the Recommended Alternative in a manner which reflects a "worst-case" scenario when it comes to affected properties. This approach means that if a parcel is significantly impacted, MDOT has assumed a total acquisition will be required.

During the design phase, MDOT will further refine the specific property requirements associated with the Recommended Alternative along both the corridor and the plaza. As a result there is a possibility that relocations identified within this FEIS may be reduced. For example, if during the design phase it is determined that only a small corner of a property is required, then it is likely not to require relocation.

Compliance with State and Federal Laws: Right-of-way acquisition, relocation assistance and advisory services will be provided by MDOT in accordance with Act 31, Michigan P.A. 1970; Act 227, Michigan P.A. 1972; the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Act 87, Michigan P.A. 1980, as amended and Acts 367 and 439 of Michigan P.A. 2006. MDOT will inform individuals, businesses and non-profit organizations if the project will have any impacts on their property. Every effort will be made, through relocation assistance, to assure property owner rights are upheld in the highest professional means possible. In accordance with Federal and State laws, MDOT cannot direct relocated residential or business property owners to specific areas (i.e., within the city of Port Huron, St. Clair County, or the state of Michigan). For a detailed discussion on relocations, see **Section 3.7** in this FEIS.

Residential: MDOT is required to determine the availability of comparable, decent, safe and sanitary housing for eligible displaced individuals. Appropriate measures will be taken to ensure that all eligible displaced individuals are advised of the rights and benefits available and course of action open to them.

Business and Non-profit Organization: MDOT is required to offer relocation assistance to displaced businesses and non-profit organizations. Appropriate measures will be taken to ensure that all eligible displaced businesses or non-profit organizations are advised of the rights and benefits available and courses of action open to them.

Purchasing Property: MDOT will pay just compensation for fee purchase or easement use of property required for transportation purposes. "Just compensation," as defined by the courts, is the payment of "fair market value" for the property rights acquired plus allowable damages to any remaining property. "Fair market value" is defined as the highest price estimated, in terms of money, the property would bring if offered for sale on the open market by a willing seller, with a reasonable time allowed to find a purchaser, buying with the knowledge of all the uses to which it is adapted and for which it is capable of being used.

Relocation Information: A booklet entitled “Your Rights and Benefits” detailing the relocation assistance program can be obtained from MDOT, Real Estate Division, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200. It can also be found online at:
http://www.michigan.gov/documents/rightsbenefits_25499_7.pdf.

Relocation Schedule and Timing: MDOT Real Estate staff will contact impacted property owners following the issuance of the Record of Decision and the securing of appropriate funding. All relocation benefits and services will be described to both owners and tenants. MDOT will coordinate with impacted property owners to minimize the impact of required relocations. Typically, owners are not required to relocate until they have obtained a suitable replacement relocation.

Property Acquisition Information: A booklet entitled “Public Roads & Private Property” detailing the purchase of private property for transportation projects can be obtained from MDOT, Real Estate Division, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200.

Conceptual Stage Relocation Plan: The updated conceptual stage relocation plan prepared for the Recommended Alternative is located in **Appendix A**.

Hardship Acquisitions: During the period between the DEIS and the release of this FEIS, MDOT continued acquiring a limited number of “hardship acquisitions”, as allowed and defined in the Federal Guidelines as having “health, safety or financial” hardships. Property Owners that believe they qualify to be purchased have been encouraged to Contact: MDOT Acquisition Project Manager, Pamela Evans at (248) 483-5187 and to send their supporting documentation to: Pamela Evans, MDOT Acquisition Project Manager, 18101 W. 9 Mile Road, Southfield, MI 48075.

Excess Property: Because MDOT has utilized a “worst-case” approach to identify impacted properties during this FEIS, there is a possibility that excess property may be available upon project completion. It is MDOT’s intent to sell all property that is identified as “excess property”.

The specific amount of available acreage of excess property will not be determined until after final design and construction are completed. However, based on the Recommended Alternative footprint, MDOT estimates that between two to ten acres of excess property may be available to be returned to the tax rolls within the city of Port Huron and between two to fifteen acres of excess property may be available within Port Huron Township.

All excess property will be sold at fair market value following the MDOT and FHWA guidelines. An overview of this process can be found at www.michigan.gov/mdot.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on relocation and right-of-way acquisitions.

5.4 How are the Aesthetic and Visual Conditions Mitigated?

Aesthetic Design Guide:

The ADG will define the plaza and corridor visual and aesthetic treatments, such as the look of all walls, fences, and proposed landscaping to be carried forward into the design and construction phases.

Mitigation of aesthetic and visual impacts will come in many forms on this project. MDOT working with its federal, state and local stakeholders will develop an Aesthetic Design Guide (ADG) to identify the proposed mitigation and project enhancement measures to be implemented during the design and construction phases. The ADG will provide an overall design direction for both the corridor and plaza project areas to assure an overall continuity is achieved between these two work elements.

The development of the Aesthetic Design Guide will utilize a local Community Advisory Committee (CAC) to develop and document the architectural and aesthetic enhancements which will be refined during the design phase. The local CAC group is made up of representatives representing various agencies, jurisdictions, and interests of the Port Huron community. This group has been appointed by city of Port Huron, Port Huron Township, and St. Clair County officials.

The ADG defines an overall theme as well as specific community characteristics that can be incorporated in the corridor and plaza architectural elements to assure these infrastructure improvements reflect the Blue Water Community.

Some of the features of the ADG include:

- Developing a standardized approach for landscaping or other methods of screening along both the corridor and the plaza
- Incorporating architectural features into the design of retaining walls, security walls, and other structures
- Utilizing directional lighting and creative berm concepts at the plaza and along the highway corridor
- Applying colors and/or textures to help soften the visual appearance of proposed structures and hard surfaces
- Developing project signing themes that can be implemented to boost tourism opportunities
- Developing specific mitigation measures to reduce any adverse impacts on the visual character on the neighborhood and businesses adjacent to the expanded plaza
- Developing guidelines for utilizing the appropriate plant species, including where appropriate native species, to develop sustainable landscapes



The ADG is currently being developed. MDOT anticipates the ADG will be completed prior to the start of the design phase (Spring 2009). The recommended themes and architectural design elements will be incorporated into the design plans for both the corridor and plaza design contracts. Furthermore, MDOT commits to continue coordination efforts with the city of Port Huron and Port Huron Township to assure desired themes are implemented during the design and construction phases of the project.



Project Enhancements: No additional enhancements are proposed to further minimize impacts on aesthetic and visual conditions.



Representative view of plaza and M-25 connector local lanes from the front yard of Scott Avenue residences

5.5 How will Traffic Noise be Mitigated?

As part of this FEIS, noise barriers were analyzed at three locations within the Study Area of this FEIS. Noise abatement through the use of noise barriers and other mitigation techniques will be considered according to the MDOT noise abatement criteria discussed in **Section 3.4 Noise**. MDOT has defined a five-decibel reduction in the design-hour L_{eq} noise level as the minimum desired standard for the implementation of noise mitigation to be considered feasible. MDOT considers \$38,060 (2007 dollars) or less per residence as the reasonability criteria for the implementation of mitigation measures. All of the noise barriers analyzed meet MDOT's feasibility criteria. However, none of the noise barriers (Noise Barriers 7, 7a, and 8) meet MDOT's definition for "reasonableness". Noise barriers are not proposed as part of this project. If final design results in substantial changes in roadway design from modeled conditions, noise abatement measures will be reviewed. During the design phase the feasibility and reasonableness of the noise barriers are reviewed in greater detail.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on traffic noise associated with the project.

5.6 How will Public Utility Services be Maintained?

MDOT will coordinate with all impacted utility companies and agencies during the design and construction phases to assure impacts are minimized to the greatest extent possible. The following section describes specific mitigation measures proposed:

Detroit Edison Company (DTE/SEMCO): The Detroit Edison Company electrical substation will require relocation as part of the Blue Water Bridge Plaza Study. The substation is proposed to be relocated southeast of its current location near Harker Street.

Additionally, the SEMCO Energy Gas lines around the periphery of the plaza will need to be relocated. MDOT will coordinate with the affected utility companies during design, and relocation will take place prior to construction of the new plaza if possible. The contractors will coordinate construction activities with the affected utility company.

MDOT will coordinate with the city of Port Huron to assure they have unfettered access to their municipal utilities both during and after construction. A utility corridor will be created around the plaza within MDOT owned right-of-way to assure access is maintained following construction. Detailed utility relocation plans will be developed and reviewed during the design phase.

MDOT will purchase the City of Port Huron's decommissioned public facility assets (constructed with city funds-no federal funds) in relation to acquiring the ROW needed to construct the BWB plaza. The fair value of these assets (sanitary sewer, storm sewer, water main, and streets) will be based on the cost to construct the facility, minus depreciation (remaining service life), and minus the salvage value of each facility.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on public utility services.

5.7 What Measures will be taken to Protect Water Quality?

Adequate soil erosion and sedimentation control measures based on MDOT's approved soil erosion program will be implemented for the Recommended Alternative. Roadway run-off will be treated by maximizing the use of vegetated buffers (300 foot minimum) for drainage conveyance and minimizing the direct discharge of bridge run-off. The Black River Bridge will be designed with a suspended storm sewer system to convey the storm runoff to adjacent slopes rather than directly off the bridge into the river. Scupper drains will not be used on the bridge portion over the water.

What are Scupper Drains?

Drains on bridges which allow water to fall into the river.

Stormwater detention basins will be constructed to control the rate of water discharged to match the existing discharge quantities. The proposed detention basins would be constructed in the northeast quadrant of the Water Street interchange and the east side of Stocks Creek, south of I-94/I-69. Run-off from the detention basins will be directed into a 300-foot long vegetated ditch prior to discharging into Stocks Creek or the Black River, to help filter any suspended sediment prior to discharge.



Existing scupper drain on the Black River Bridge

Stormwater detention for the proposed plaza expansion will either utilize a portion of the city of Port Huron's stormwater run-off system or develop a separate system to manage all stormwater run-off. During the design phase detailed stormwater detention plans will be developed. MDOT will coordinate with the city of Port Huron, a Phase II community, MDEQ and St. Clair County to identify and design the appropriate stormwater detention facilities.

Disturbed sanitary sewer lines will be restored to preconstruction condition.



Example of a detention basin

The use of best management practices (BMPs), including vegetative controls such as swales and buffer strips will be evaluated in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) statewide stormwater discharge permit.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on water quality within the project Study Area.

5.8 What Measures will be taken to Protect Groundwater?

Sealing water wells and sewer lines for the protection of groundwater quality is ensured by MDOT specifications imposed on the contractor. For houses or other structures in urban situations that are relocated or must be torn down, sewer lines must be filled with concrete grout at the basement level, and water must be turned off at the street. Abandoned water wells must be filled with cement grout applied from the bottom upwards through a conduit extended to the bottom of

the well (in one continuous operation) until the well is filled. The contractor must also meet all local and Michigan Department of Community Health (MDCH) requirements.

Contractors are generally allowed 60 to 90 days following issuance of the demolition contract for the site to be completely cleared. However, only 48 hours is permitted following removal of any structure to fill the foundation to ground level. If the foundation is not filled within this time, MDOT may take independent action to fill the foundation, charging the costs incurred to the contractor. The MDEQ notification procedures for demolitions will be followed.

The above specifications have been approved by the MDCH. The contractor is also referred to the local health department for assistance when special conditions such as flowing wells or wells with a high artesian head are encountered. If high water tables are encountered in cut sections, special methods will be used to reduce any negative effects on the area groundwater. One such method is to raise the road grade.

Drains will be built as necessary along the pavement to drain the roadway sub-base. Edge drains are used to intercept horizontal seepage. Stone baskets are used to maintain and reroute the flow of springs when found below the roadway. Intercepted water will be discharged into an available roadside ditch or watercourse. Siltation of watercourses from intercepted water is rare.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on groundwater within the project Study Area.

5.9 What Measures will Protect Floodplains, Streams, and Drain Crossings?

Bridge and culvert work at river, stream, and drain locations will require construction staging and additional protection items to minimize impacts on the watercourse. The following items are general mitigation items designed to reduce impacts at water crossings. The design plans will show all specific controls for each watercourse.

Artesian Head

Is a groundwater feature under enough pressure to rise above the aquifer containing it.



Black River Bridge

Erosion

Is the wearing down or washing away of the soil and land surfaces by water or wind.

What is Riprap?

Is large rock or other material placed along the banks of a body of water to prevent erosion.



Example of riprap

1. All work below the ordinary high water mark of The Black River and Stocks Creek will require permits from the Michigan Department of Environmental Quality, and/or the U.S. Army Corps of Engineers. All permit conditions will be adhered to during construction. No work will be done in the Black River or Stocks Creek between March 15th and June 30th to provide protection for fish spawning. Work may be done behind an enclosed cofferdam installed prior to the start of the protection dates.
2. All construction operations adjacent to watercourses will include appropriate temporary and permanent erosion and sedimentation controls.
3. The contractor will be required to maintain a navigable channel on the Black River during all phases of the project. During part-width construction operations, the contractor will place signs both upstream and downstream of the construction area that clearly indicates the location of the navigable channel. The contractor may be required to provide lighting for their barges or other navigation obstructions at night.
4. All construction activities will be isolated from flowing watercourse where possible. This can be done by installing a cofferdam (steel sheeting or sand bags) around the construction area.
5. Any channel excavation or riprap placement will be done using part-width construction methods. Work will be done on part of the channel while the water flow is temporarily diverted away from the work area. MDOT has a standard detail showing the temporary water flow diversion that will be included on the design plans for all projects that require in-stream work.
6. Fill quantities within the 100-year floodplain that exceed 300 cubic yards will require compensating cut to prevent any increase in upstream water surface elevations.
7. Water from dewatering operations will be treated prior to discharge.

A Construction Staging Plan will be provided to the contractor that will define construction access to the Black River Bridge piers. The Construction Staging Plan will be prepared and reviewed with MDEQ prior to any Act 451, Part 31 (Floodplains and Water Quality) and Part 301 (Inland Lakes and Streams) permit application. Coordination regarding the Construction Staging Plan will also occur with the U.S. Army Corps of Engineers and U.S. Coast Guard prior to the submittal of federal permit applications. The plan will include soil erosion/sedimentation controls including dewatering operations, temporary causeway/access pad design, installation/removal phasing, and stream navigation requirements (signing and lighting).

The Recommended Alternative will require approximately 625 cubic yards of required fill within the 100-year floodplain of the Black River. The MDEQ requires compensatory storage if more than 300 cubic yards of fill material is placed in the 100-year floodplain.

To ensure that all environmental and hydraulic impacts associated with the floodplain crossings of the Recommended Alternative are minimized, further evaluation of crossing options will be conducted during the design phase. This will include an examination of bridge spans and approaches, median widths, and side slopes. The analysis will consider existing and proposed conditions, and will determine the necessary and proper bridge types, openings, lengths, and locations of abutments and piers, to minimize or eliminate floodplain impacts.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on floodplains, streams, and drain crossings within the project Study Area.

5.10 How are Wetlands Mitigated?

For those wetland impacts that cannot be avoided, MDOT will restore previously existing wetlands or create new wetlands in accordance with Act 451, Part 303 Wetland Protection. The wetland mitigation site will be designed, constructed, and monitored in accordance with MDEQ's Technical Guidance for Wetland Mitigation dated September 9, 2003. Wetland

mitigation will occur within the Black River watershed on the relocated Welcome Center property west or north of the Welcome Center. Wetland impacts will be mitigated at a ratio of 2:1 for forested wetlands, and 1.5:1 for emergent, scrub-shrub, and open water wetlands. Compensatory mitigation will be in kind; i.e., it will attempt to replace the ecological types and functional values of wetlands impacted.



Wetland Mitigation: Before



Wetland Mitigation: After

Monitoring the wetland mitigation site is necessary to determine if the wetland meets the MDEQ's performance standards. Monitoring of the wetland will include items such as water level measurements, vegetation sampling, measurements of different habitat types, documentation of any wildlife activity, photographic records, and documentation of any problem areas. Monitoring of the mitigated wetland will be required for a minimum of five years following construction with a monitoring report submitted annually to the Michigan Department of Environmental Quality. Once the mitigated wetland is constructed the site will be protected by a permanent conservation easement to provide for the permanent protection of the natural resource functions and values of the mitigation site. The wetland mitigation site is proposed to be located on MDOT owned property north of the Michigan Welcome Center. No public access will be permitted from the Michigan Welcome Center or West Water Street to the mitigated wetland site for the purposes of utilizing the site for developing walkways, signage, or other educational initiatives.

Although final design will likely result in the further minimization of wetland impacts, preliminary impacts and compensatory mitigation acreages are used for planning purposes at this stage of the project. The preliminary wetland impact calculations and acreages of proposed mitigation for the Recommended Alternative are summarized in **Table 5.10.1**.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on wetlands within the project Study Area.

Table 5.10.1 Summary of Wetland Mitigation

	Impacts to Forested Wetlands	Proposed Mitigation Acreage Required	Impacts to Emergent, Scrub-Shrub, or Open Water Wetlands	Proposed Mitigation Acreage Required	Total Proposed Mitigation Acreage Required
Recommended Alternative	1.12 acres	2.24 acres	3.24 acres	4.36 acres	7.10 acres

5.11 What Measures are taken to Protect Existing Vegetation?

Although some tree removal will be necessary, the existing natural and ornamental vegetative cover will be retained wherever possible within the right-of-way. Where the existing groundcover must be removed, replacement vegetation will be established in a timely manner using seed and mulch, or sod.

To minimize impacts on vegetation, The Aesthetic Design Guide discussed in **Section 5.4** will guide project decision makers during the design and construction phase as to the type of species and general landscaping themes that should be adhered to.

Roadside trees adjacent to residences will be saved wherever possible. Where trees are to be removed from in front of remaining residences, property owners will be given appropriate notice, and will be offered replacement trees to help offset the functional or aesthetic loss of the trees.

Replacement tree species, size, and numbers will be determined by MDOT's Region Resource Specialist or the Roadside Development Section following coordination with adjacent property owners. For those owners who request replacement trees, the trees will be placed (with the property owner's approval) on adjacent private property as close to the right-of-way line as possible. Property owners will then assume the responsibility for maintaining these trees.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on existing vegetation within the project Study Area.

5.12 What will be done to Maintain Wildlife Habitat?

Impacts to terrestrial and aquatic habitats will be minimized during final design through refinements that maintain existing hydrological conditions, and require construction techniques that minimize the removal of mature trees.

The Black River is managed by the Michigan Department of Natural Resources for trout and salmon. However it is not a designated trout stream. No work will be done in the Black River or Stocks Creek between March 15th and June 30th to provide protection for fish spawning. Work may be done behind an enclosed cofferdam installed prior to the start of the protection dates. Coordination with the MDNR Fisheries Division will occur during the design phase to determine project drainage in the vicinity of the Black River and Stocks Creek.



Spotted Turtle

Project Enhancements: No additional enhancements are proposed to further minimize impacts on wildlife habitat within the project Study Area.

5.13 How are Threatened and Endangered Species Mitigated?



Round Hickory-Nut Mussel

Two animal species, the spotted turtle (*Clemmys guttata*) and round hickory-nut mussel (*Obovaria subrotunda*), were identified by the Michigan Department of Natural Resources and the Michigan Natural Features Inventory as having potential to exist within the Study Area. The spotted turtle is classified by the State of Michigan as a threatened species and the round hickory-nut mussel is classified by the State of Michigan as an endangered species. No records of federally protected plant species were identified within the Study Area.

No state or federal threatened and endangered animal species were found within the Study Area during the field surveys

conducted from September 2003 through June 2004. However, habitat that could be used by the spotted turtle is present within the Study Area adjacent to Stocks Creek.

Special care will be given when working in the potential spotted turtle habitat. Timing of construction will avoid habitats used by the turtle during that particular time of year. June is the primary month female turtles leave their drying pools to nest in nearby upland areas. Thorough searches will be conducted for the turtle within the area of work, and if found, relocated to an appropriate safe area. Barriers will also be constructed to stop the potential for re-entry of the turtle into the work zone. No work will occur in wetland areas adjacent to Stocks Creek between mid-October and the end of March in order to protect potential winter hibernating habitat for the spotted turtle. Any turtles found will be relocated to an appropriate safe area.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on threatened or endangered species within the project Study Area.

5.14 What will be done to ensure no Migratory Birds will be Impacted?

On projects that involve work on structures over watercourses, MDOT reviews potential impacts to migratory birds that may make (or have made) nests underneath the bridges. During the design phase of the project, the Black River Bridge will be reviewed for past migratory bird nesting activity. If evidence of migratory bird nesting is discovered, coordination between MDOT (Environmental Section and Region Resource Specialist), MDEQ, the U.S. Army Corps of Engineers, U.S. Coast Guard and U.S. Fish and Wildlife Service will occur.

A “Special Provision” that describes procedures for dealing with migratory birds will be included within the project specifications. MDEQ permits required to conduct work on bridges over watercourses may include specific dates when work on bridges will be prohibited for the protection of migratory birds.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on migratory birds within the project Study Area.

5.15 How are Hazardous/Contaminated Materials Mitigated?

The Study Team performed two Project Area Contamination Surveys (PACS) of the areas surrounding the existing Blue Water Bridge Plaza. The purpose of these surveys was to locate and identify potential contaminated sites within or near to the potential areas of construction. Such sites would contain Recognized Environmental Conditions (RECs).

A total of 20 RECs were identified during the assessment of existing conditions; 18 of these sites could be affected by construction as part of the reconstruction of the existing plaza under the Recommended Alternative. Two sites will be impacted by reconstruction of the Water Street interchange.

Further consideration of contaminated sites and hazardous materials in the Study Area will be necessary to ensure the safety of workers during construction, prevent any future migration of existing subsurface contaminants, and address potential liability associated with purchase of those parcels. Under the Recommended Alternative, a Phase II subsurface assessment will be needed to further investigate the contamination at the REC sites. Depending upon the findings of the Phase II assessment, it may be necessary to perform further investigation or remediation.

Any structures acquired for the project will be tested for asbestos-containing materials and lead-containing materials before demolition. A Worker Health and Safety Plan will be prepared if any of these materials are identified.

MDOT will also coordinate with the MDEQ Water Bureau and the Waste and Hazardous Materials Division when limits of excavation or disturbance of bottom sediments is determined in areas of known river, stream, or lake bottom sediment contamination. Coordination could include testing of bottom sediments within the project area, reviewing results with the Water Bureau to determine if any contamination exists, and

reviewing results with the Waste and Hazardous Materials Division to determine if any special disposal methods will be required.

Recycling programs will be used if they are provided by the community and do not compromise maintenance or security.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on hazardous or contaminated sites within the project Study Area.

5.16 How are Cultural Resources Mitigated?

Measures to minimize impacts include avoidance, preservation in place, and recordation of the property and structures prior to the start of construction activities. Avoidance is preservation in place for above-ground resources; for archaeological resources Michigan SHPO/OSA typically require recovery not preservation in place if avoidance is not an option. Recordation is typically only conducted if there is an adverse effect by a project and is considered part of mitigation and not minimization. Appropriate mitigation measures will be developed through consultation between MDOT, SHPO, and any affected property owners. Archaeological surveys conducted within the Study Area found no evidence of historic or prehistoric artifacts. Based on these surveys, there is a low probability of finding any archaeological resources in the Study Area. There is one historic property, located at 2511 10th Avenue and known as the E.C. Williams House, that was recommended as eligible for the National Register of Historic Places. The E.C. Williams House will be directly affected by the Recommended Alternative. The Recommended Alternative would take the block that the E.C. Williams House resides and convert the space to both green space and visitor parking for those interested in signing up for the FAST and NEXUS programs.

Based on the direct impact to the house, MDOT has received concurrence from SHPO on March 15, 2007 that the Recommended Alternative will adversely affect this property. An updated Memorandum of Agreement (MOA) is included in **Appendix B**. A final signed MOA will be included in the Record of Decision (ROD) for this project. SHPO has

The National Register of Historic Places is

The official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.



E.C. Williams House

concurred that relocating the house would be preferred to demolition. As a result of this impact the E.C Williams House will be relocated to an MDOT owned property located on Elwood Street in Port Huron.

Project Enhancements: No additional enhancements are proposed to further minimize impacts on cultural resources within the project Study Area.

5.17 What Permits will be Required for Construction?

MDOT will require various permits for construction activities. MDOT obtains these permits from various state, federal, and local agencies with jurisdiction over lakes, streams, drains, wetlands, threatened and endangered species, air quality, or other environmental resources. The following is a list of permits that MDOT will be required to get for construction of a new plaza for the Blue Water Bridge and new Black River Structure.

State Permits:

- *Wetlands* - MDOT must obtain a permit from the MDEQ Land and Water Management Division for any wetlands disturbance, temporary as well as permanent. Permanent disturbances would include the placement of any fill material in wetlands. This permit is issued pursuant to the Clean Water Act, Section 404 of 1972 and Part 303, Wetlands Protection of Michigan P.A. 451 Natural Resources and Environmental Protection Act, 1994, as amended.
- *Point Source Discharge of Stormwater* - MDOT must obtain coverage from the MDEQ Water Bureau for discharging stormwater into inland lakes, streams, or drains. This coverage is issued pursuant to Part 31 Water Resources Protection of P.A. 451, as amended and Section 401 of the Clean Water Act of 1972.
- *Fill in Floodplain* - MDOT must obtain a permit from the MDEQ Land and Water Management Division to place fill material within any part of a floodplain with a drainage

area of two square miles or greater. This permit is issued pursuant to Part 31, Floodplain Regulatory Authority of P.A. 451, as amended.

- *Work Below Ordinary High Water Mark* - MDOT must obtain a permit from the MDEQ Land and Water Management Division for any work below the ordinary high water mark of any inland lake, stream, or drain including the placement of a temporary crossing, haul road, or construction access pad. This permit is issued pursuant to Part 301, Inland Lakes and Streams of P.A. 451.
- *Installation of Bituminous or Concrete Plants* - MDOT or its designated contractor must obtain a permit from the MDEQ Air Quality Division for the installation and use of bituminous or concrete plants during construction. This permit is issued pursuant to Part 55, Air Pollution Control of P.A. 451.

Federal Permits:

- *Black River and Adjacent Wetlands* - MDOT must obtain a permit from the United States Army Corps of Engineers for the placement of fill material in waters of the United States. This permit is issued pursuant to U.S. Section 404, Clean Water Act of 1972 and U.S. Section 10 River and Harbors Act of 1899.
- *Impacts to Navigable Waterways* - MDOT must obtain clearance from the United States Coast Guard for potential impacts to the Black River as a navigable waterway. This clearance is issued pursuant to U.S. Section 9 River and Harbors Act of 1899.

In addition to the above permits, MDOT will also have to provide notice of coverage to MDEQ for stormwater discharges during construction activities under the National Pollution Discharge Elimination System. MDOT has determined that no permits for threatened and endangered species or impacts to registered contaminated sites will be required for the project.

MDOT will develop final mitigation measures for the areas requiring the above permits in consultation with the appropriate resource agencies and will include them in the permit application.

Project Enhancements: No additional enhancements are proposed that would require additional permits.

5.18 How will Traffic be Maintained During Construction?

Disruption of traffic in the construction area will be minimized to the greatest extent possible. A detailed discussion of preliminary maintenance of traffic concepts associated with the Recommend Alternative is discussed in **Chapter 2**. Although control of all construction-related inconveniences is not possible, especially at the environmental clearance phase, motorist and pedestrian safety will be of utmost importance in future planning efforts and access will be maintained to properties adjacent to the Study Area to the extent possible.

During construction, traffic will be maintained using both part-width construction techniques and the use of detour routes. Part-width construction techniques involve maintaining the traffic on one half of the roadway while the other half is being reconstructed. Detours would involve temporarily closing down certain roadways for construction while providing an alternate route of transportation. MDOT will make every effort to reach agreement with the City and County Road Commission engineering staffs on final goals and implementation strategies for the project construction staging, prior to the beginning of construction. Below is a summarized list of preliminary planning goals for the project construction staging:

- Provide two lanes of I-94/I-69 traffic in each direction
- All Plaza operations will be maintained throughout construction with the aid of temporary connections
- Minimize Water Street and Lapeer connector ramp closures
- Maintain Water Street traffic over I-94/I-69 throughout construction

- Complete the upgraded Black River Bridge prior to beginning construction on the plaza
- Maintain two lanes of Pine Grove Avenue traffic in each direction
- Maintain access to businesses and minimize delay to thru traffic

As part of MDOT's maintenance of traffic design plan development phase, every effort will be taken to minimize access disruptions to local businesses. Prior to the beginning of construction, MDOT also commits to continued coordination with the officials from the city of Port Huron, St. Clair County Road Commission, Port Huron Township, Blue Water Area Transit Authority, and local emergency responders.

Informing the public of current and upcoming construction/traffic related concerns will be an important part of the construction process. Public awareness will be maintained throughout the project by addressing public concerns, and providing specific information such as duration and location of detours, lane closures, alternative routes, upcoming activities, and anticipated construction deadlines. This will be completed through the use of a Motorist Information Plan, which will provide as much information to visitors, motorists, area residents, and business owners as possible through the use of temporary electronic message signs, the project website (www.michigan.gov/mdotstudies), and the toll-free project hotline (1-800-955-3515).

Project Enhancements: No additional enhancements are proposed to further minimize traffic disruptions during construction.

5.19 How will Construction Impacts to Surface Streets be Mitigated?

The contractors will be required to repair of all surface streets that are damaged as a result of being used as a detour or for equipment access. Upon completion of construction activities, roadway inspections will take place and permanent repairs will be made as necessary.

Project Enhancements: No additional enhancements are proposed to further minimize construction impacts on surface streets.

5.20 How are Surplus or Unsuitable Materials Disposed?

Unsuitable material

Can be any unwanted items leftover from clearing or preparing the site for construction, such as tree stumps or broken concrete.



Example of damage caused by erosion

Sedimentation

Is a process that deposits soils, debris, and other materials either on the ground surface or in bodies of water

Surplus or unsuitable material generated by removal of structures, trees, peat, etc., must be disposed of in accordance with the following provisions designed to control the possible detrimental impacts of such actions:

1. All regulations of the MDEQ governing disposal of solid wastes must be complied with.
2. Inert debris may be used as a basement fill to a depth not less than three feet below the ground level if the basement is not within the roadway cross-section. Debris used as fill must be covered with at least three feet of clean soil to fill voids. Basement walls are to be removed to ground level.

When surplus or unsuitable material is to be disposed of outside of the right-of-way, the contractor shall obtain and file with MDOT written permission from the owner of the property on which the material is to be placed. In addition, no surplus or unsuitable material is to be permanently or temporarily disposed of in any public or private wetland area, watercourse, or floodplain.

Project Enhancements: No additional enhancements are proposed to address the disposal of surplus or unsuitable materials.

5.21 How will Soil Erosion and Sedimentation be Prevented?

Accelerated erosion and sedimentation caused by construction will be controlled before it enters a water body or leaves the right-of-way by the placement of temporary or permanent erosion and sedimentation control measures. MDOT has developed a series of standard erosion control items to be included in design plans to prevent erosion and

sedimentation. The design plans will describe the erosion controls and their locations. Payment is made to the contractor for construction and maintenance of items used from this list or items specifically developed for the project.

MDOT has on file with MDEQ an approved operating erosion and sedimentation control program which ensures compliance with Act 451, Part 91 Soil Erosion and Sedimentation Control. MDOT has been designated an “Authorized Public Agency” by MDEQ and is self-regulated in its efforts to comply with Part 91. However, MDEQ may inspect and enforce soil erosion and sedimentation control practices during construction to ensure that MDOT and the contractor are in compliance with Part 91 and the acceptable erosion and sedimentation control program.

The following is a partial listing of general soil erosion and sedimentation control measures to be carried out in accordance with permit requirements.

1. No work will be done in the Black River or Stocks Creek channels during periods of seasonally-high water, except as necessary to prevent erosion.
2. All road and bridge construction operations will be confined to the existing or proposed right-of-way limits or acquired easements.
3. Road fill side slopes, ditches, and other raw areas draining directly into the Black River or Stocks Creek will be protected with riprap (up to three feet above the ordinary high water mark), sod, seed and mulch, or other measures, as necessary to prevent erosion.
4. The surface area of erodible earth material exposed at any one location at one time will be limited to 5,000 feet of dual roadway or 10,000 feet of single roadway. Once the contractor has final graded and stabilized a section of roadway, additional clearing and grading will be allowed.
5. Areas disturbed by construction activities will be stabilized and vegetated within five days after final grading has been completed. Where it is not possible to permanently



Silt fencing helps to control erosion and sedimentation during construction

Ordinary High Water Mark

For streams, the OHW is generally the top of the bank of the channel.

Grading

Is the process of smoothing, leveling, or creating desired ground slopes in preparation for construction.

stabilize a disturbed area, appropriate temporary erosion and sedimentation controls will be implemented. All temporary controls will be maintained until permanent soil erosion and sedimentation controls are in place and functional.

6. The contractor shall have the capability of performing seeding and mulching at locations within 150 feet of any wetlands, lakes, streams, and drains within 24 hours of being directed to perform such work by the engineer.
7. Special attention will be given to protecting the natural vegetative growth outside the project's slope stake line from removal or siltation. Natural vegetation, in conjunction with other sedimentation controls, provides filtration of run-off not carried in established ditches.
8. The integrity of any agricultural drainage or field tile system encountered will be maintained.
9. The contractor will be responsible for preventing the tracking of material onto local roads and streets. If material is tracked onto roads or streets, it shall be immediately removed.

Project Enhancements: No additional enhancements are proposed to address soil erosion and sedimentation.

5.22 How will Noise and Vibration be Controlled During Construction?



Special care will be given to prevent excess noise and vibration

Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors if at all possible. Construction activities will be limited to dawn to dusk and all local noise ordinances will be followed.

Where pavement must be fractured, structures removed, or foundation piles driven, care will be taken to prevent vibration damage to adjacent structures.

Contingent upon property owner approval, MDOT will make an assessment during the design phase as to which structures will have basement surveys completed. MDOT's contractor will be responsible for the costs associated with the required basement foundation surveys. MDOT will determine during the design phase which structures will be offered basement/foundation surveys. Monitoring will occur before, during, and after the construction phase. Vibration impacts are not expected at this time.

Project Enhancements: No additional enhancements are proposed to address noise and vibration impacts associated with the project.

5.23 How will Air Pollution be Controlled During Construction?

The construction contractors must comply with all federal, state, and local laws and regulations governing the control of air pollution.

Dust Control: During the construction of any project, the contractors will be responsible for adequate dust-control measures so as not to cause detriment to the safety, health, welfare, or comfort of any person, or cause damage to any property, residence, or business.

Bituminous and Concrete Plants: All portable bituminous and Portland cement concrete proportioning plants and crushers must meet the requirements of the rules of part 55 of Act 451, Natural Resources and Environmental Protection. Any portable concrete plant must meet the minimum 250-foot setback requirement from any residential, commercial, or public assembly property or the contractor is required to apply for a permit to install from MDEQ. Portable crushers must have a setback of 500 feet or more for a general permit; otherwise, a permit to install is required. Asphalt plants must have a setback of 800 feet or more or a site specific permit is required. The permit process including any public comment period, if required, may take up to six months. Dust collectors must be provided on all bituminous and concrete proportioning plants. Dry, fine aggregate material removed from the dryer exhaust by the dust collector will be returned

Bituminous

Bituminous refers to asphalt pavement.

What does PM stand for?

Particulate matter (PM) is the term for solid or liquid particles suspended in the air. Some particles are large or dark enough to be seen as soot or smoke, but fine particulate matter is generally not visible to the naked eye.

to the dryer discharge unless otherwise directed by the engineer.

Construction emissions may represent a large temporary source of PM_{2.5} emissions. The implementation of a construction emissions reduction plan may be considered to target emissions from construction sources. This plan might include actions such as:

Retrofitting off-road construction equipment; using ultra-low sulfur fuels for all equipment; limiting the age of on-road vehicles used in construction or requiring diesel particulate traps and oxidation catalysts; minimizing engine operations; restricting construction activities around certain more sensitive receptors, instituting fugitive dust control plans; and using existing power sources or clean fuel generators, rather than temporary power generators.

Off-Road Construction Equipment: Construction equipment will be retrofitted with diesel oxidation catalysts or diesel particulate filters from the EPA or the California Air Research Board Verified List. Additionally, emissions will be further reduced by installing retrofit emission control devices on all non-road equipment with higher emissions than EPA's Tier 2 Standards. **Table 5.23.1** indicates the model year for which these standards take effect. Equipment that is of a model year older than the year given for that equipment's respective horsepower range should be retrofitted.

Table 5.23.1 Construction Equipment Emission Control Standards (by Model Year)

Horsepower Range	Model Year (or newer)
50-99	2008
100-174	2007
175 and up	2006

Nuisance Odors and Unnecessary Air Pollution: In addition to installing the required emission control devices, contractors should be required to use methods to control nuisance odors and unnecessary air pollution associated with diesel emissions

from construction equipment including, without limitation, the following:

1. turning off diesel combustion engines on construction equipment not in active use, and on trucks that are idling while waiting to load or unload material for five minutes or more;
2. locating diesel equipment away from the general public and sensitive receptors (e.g., fresh air intakes, air conditions, and windows); and
3. utilizing electronically-powered scissor/man lifts.

Signage: The addition of signage at the Plaza and along the Blue Water Bridge will encourage truck drivers, tour bus drivers, and drivers of passenger vehicles to turn off engines to reduce unnecessary idling during long delay periods. For example, signs can be activated when accidents occur on the Bridge or at the Plaza or during peak traffic periods or when vehicles awaiting customs inspection will be stopped for a lengthy period of time, unless idling is necessary to power work-related mechanical or electrical operations for reasons other than propulsion.

Project Enhancements: MDOT will participate in funding to support efforts for SEMCOG to develop a plan for PM2.5 attainment within the southeast Michigan region.

5.24 What Commitments are being made to Improve Local Access and Circulation?

Project Enhancements: The Michigan Department of Transportation has incorporated several enhancements into the design of the Recommended Alternative which improve local circulation and access to the Port Huron community. These enhancements were developed as part of continued coordination efforts with the city of Port Huron, Port Huron Township, and St. Clair County. The following section describes the proposed enhancements that MDOT commits to adding to the project:

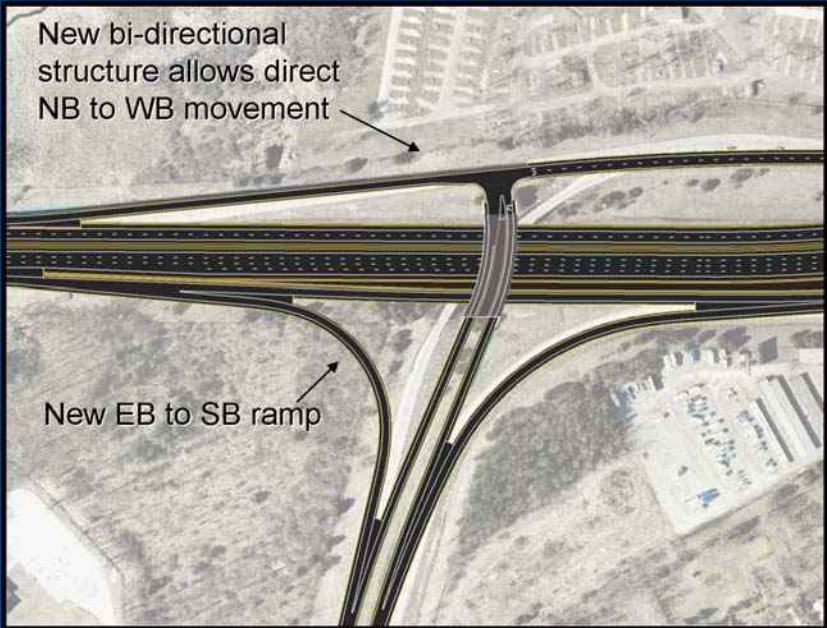
Full Access Lapeer Connector Interchange: MDOT will reconstruct the existing partial I-94/I-69/Lapeer connector interchange to provide full access from all directions of I-

94/69. Currently no eastbound I-94/I-69 to southbound Lapeer connector movement or northbound Lapeer connector to westbound I-94/I-69 access is provided. MDOT as part of the Recommended Alternative will acquire the necessary right-of-way and construct the necessary infrastructure to provide these missing movements. These improvements will improve access for emergency responders as well enhance economic development opportunities. The estimated cost of this project enhancement is \$4,400,000.

FULL ACCESS I-94/I-69 LAPEER CONNECTOR INTERCHANGE

- Existing configuration requires all freeway traffic to Lapeer to use the Water St interchange
- New configuration provides full access at Lapeer and Water St

Estimated Cost:
\$4.4 million



New bi-directional structure allows direct NB to WB movement

New EB to SB ramp

U.S. Department of Transportation
Federal Highway Administration

MDOT
Michigan Department of Transportation

Realignment of relocated Pine Grove Avenue north of Hancock Street: MDOT's original alignment (PA-4 shown below) for the realignment of Pine Grove Avenue continued north on the existing M-25 connector alignment. In consultation with the city of Port Huron and Port Huron Business Coalition, the alignment was modified (as shown just below) to connect back into existing Pine Grove Avenue just north of Hancock Street.

This modification will provide improved access and visibility to existing business located north of the plaza. The estimated cost associated with additional right-of-way and construction materials to make this project enhancement is \$2,800,000.



REALIGNED PINE GROVE AVENUE

- Improved visibility and access
- Increased redevelopment opportunities
- Increased traffic volumes
 - Exist. Pine Grove ADT 21,100
 - Preferred Alt. ADT: 27,400

Estimated Cost:
Additional \$2.8 million





M-25/Pine Grove Avenue Traffic Signal Synchronization Study:

MDOT completed a traffic signal optimization study for M-25/Pine Grove Avenue in February 2006. This study recommended signal timing changes to improve the flow of traffic on this important north/south corridor within the Port


Huron community. Following completion of the plaza project, MDOT commits to completing a similar follow-up study to determine if signal timing changes need to be made along M-25. MDOT estimates the cost of this study and necessary implementation measures at \$150,000.

SYNCHRONIZED SIGNALS ALONG M-25

 **New Signals**

 **Existing Signals Removed**

- The BWB Plaza local road signals will be timed in conjunction with the findings of the 2006 progression report
- 3-signals removed, 4-signals added, and 1-signal improved at 10th Ave
- Relocated Pine Grove significantly improves traffic operations within the project limits
- MDOT committed to conduct a follow-up study after construction



Estimated Cost: \$150,000

What is Wayfinding?

Wayfinding can be described as the process of using spatial and environmental information to find our way in the built environment.




Fund the Development and Installation of a Local Wayfinding Program: Working with the city of Port Huron, MDOT will fund the development and installation of a local wayfinding program designed to increase access and awareness of key local tourism destinations. MDOT will work with city staff to design appropriate signage and make the necessary installations to assure visitors can find their way from the expanded plaza facility to key local destinations as well as key transportation corridors (i.e., M-25, I-94/69,). All sign installation will occur once the plaza has been completed. MDOT estimates the cost of this program to be \$100,000.


5.25 What Commitments are being made to Improve Non-Motorized Facilities and Circulation within the Community?

Project Enhancements: The Michigan Department of Transportation has incorporated several enhancements into the design of the Recommended Alternative which improve non-motorized access and circulation between the city of Port Huron and Port Huron Township, and connectivity with other existing non-motorized systems. These enhancements were developed as part of continued coordination efforts with the city of Port Huron, Port Huron Township, and St. Clair County. The following section describes the proposed non-motorized enhancements that MDOT commits to adding to the project.


Non-Motorized Crossing of the Black River: MDOT will construct a 14' non-motorized crossing on the south side of the newly expanded I-94/I-69 Black River Bridge. This will be a multi-

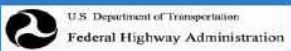
NON-MOTORIZED CIRCULATION AND ACCESS






- Black River non – motorized structure cost \$3 million
- Non-motorized path from Black River Bridge to St Clair River \$0.5 million
- 10-14 foot sidewalk to allow bikes and pedestrians








directional facility and will be designed to accommodate both pedestrians and bicyclists. The path will be separated from traffic using a crash-tested safety barrier. The path will connect with the existing sidewalks along Water Street and the newly constructed non-motorized facilities along relocated Pine Grove Avenue. The estimated cost of this project enhancement is \$3,000,000.

Non-Motorized Connection from 10th Avenue to the St. Clair Parkway: MDOT will support the submittal of a local enhancement application to fund a new non-motorized connection from 10th Avenue to the St. Clair Parkway system (under/near the existing Blue Water Bridge). The estimated cost of this project is \$500,000.



5.26 What Commitments are being made to Improve Economic and Community Redevelopment Opportunities within the Greater Port Huron Area?

Project Enhancements: The Michigan Department of Transportation has incorporated several enhancements into the project that are designed to improve economic and community redevelopment opportunities within greater Port Huron. The following section describes the proposed economic and community development enhancements that MDOT commits to adding to the project.



Charting the Vision: Port Huron

- What kind of economic future does Port Huron want?
- Begin with a desire to forge a positive outcome for the future
- Build a realistic plan considering advantages, challenges, trends and conditions

Economic Development Plan: MDOT will fund the development of an Economic Development Plan. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy

for the future. The economy of Port Huron and St. Clair County is changing; globalization and new technologies continue to accelerate the rate of that change. With an Economic Development Plan in place St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

This county-wide economic development strategy will consider the economic conditions of the region, capture the essential elements of any earlier economic development plans for the community, and identify strategies and specific actions of importance to the region's economy. The goal is to improve the economic prosperity of the region, to define a plan that builds on the region's strengths including the transportation network, the proximity to international markets, the workforce, and other factors that make this area an exceptional place to live and work. The plan will also identify areas of concern that should be considered going forward and the goals and actions that the community should collectively pursue. The St. Clair County Economic Development Alliance will serve as the local coordinating agency for this effort. The estimated cost of this plan is \$220,000.

Fund Economic Development Experts and Services: MDOT commits to fund up to \$1 million for economic development services to fund the implementation of the aforementioned plan. An agreement will be developed with an appropriate local agency that will be responsible for using these funds to implement key strategies that are developed as part of the economic development plan. The estimated cost of this project enhancement is \$1,000,000.

Fund a local Visitor Center Addition: In collaboration with the Blue Water Area Chamber of Commerce, MDOT will fund an addition to the Chamber's office for the purposes of housing a local visitor center. This facility could be used to disseminate local tourism information and promote the tourism and economic development opportunities which exist within the Port Huron community. MDOT commits up to \$300,000 to be used to help defray construction costs associated with the facility. Those funds could be used for such uses as retail

space for limited Blue Water merchandise, a community kiosk used for virtual community tours, and limited conference space for international business meeting and training opportunities. The estimated cost of this project enhancement is \$300,000.

Continue Coordination with Community Assistance Team: MDOT commits to continue coordination efforts with other state and federal agencies to bring additional resources to the greater Port Huron community. Such examples include coordinating with the Michigan Economic Development Corporation, the Michigan State Housing Development Authority, the Michigan Department of Labor and Economic Growth for job training assistance and the Michigan Department of Environmental Quality to determine if any of these agency's existing programs, grants, or resources can be applied to future redevelopment opportunities.

5.27 What Commitments are being made to Improve Land Use and Zoning Decisions around the Expanded Plaza Area?

Project Enhancements: MDOT has incorporated the following enhancement in order to minimize the impacts and costs on the city of Port Huron associated with pursuing innovative redevelopment strategies for the area surrounding the plaza. The following section describes the proposed land use and zoning services which MDOT commits to adding to the project.

Model Master Plan/Zoning Ordinance Updates: As there will likely be some area surrounding the expanded plaza that will be deemed excess property, MDOT will fund the development of a model ordinance and Master plan update for the area immediately adjacent to the expanded plaza. Redevelopment in established urban areas such as the area around the existing plaza can be difficult. This analysis will assess whether the city's existing Master Plan and Zoning Ordinance need to be modified to support infill and redevelopment opportunities and increase economic competitiveness for the city of Port Huron. Innovative redevelopment tools such as creating a unique overlay or corridor zones around the expanded plaza

area could also be examined. MDOT will provide funding to prepare the assessment and the model Master Plan and Zoning Ordinance updates. The city of Port Huron will be responsible for doing updates and implementing any of the recommendations that are developed from this effort. The estimated cost of this effort is \$50,000.

5.28 What Commitments are being made to Address the Increased Demand on Local Emergency Services Associated with a Larger Plaza?

Project Enhancements: MDOT has incorporated the following enhancement into the project designed to assure emergency services required on the plaza do not place an unfair burden on local emergency response providers.

Payment for Emergency Response Services: MDOT currently provides an annual payment to the city of Port Huron of \$200,000 for emergency response services on the plaza. MDOT also pays Port Huron Township \$5,400 annually as a secondary emergency responder on the plaza.

In order to address the possibility of increased risk associated with future traffic increases coming across the expanded plaza, MDOT commits to annually reimburse the city of Port Huron \$300,000 for emergency services provided on the expanded plaza (assuming the city remains the primary first responder). MDOT will index this payment to the Consumer Price Index (C.P.I.) or a similar index for a period of 10 years to account for inflationary factors. MDOT also will commit to annually reimburse Port Huron Township \$8,500 for emergency services provided on the expanded plaza as a secondary emergency responder (assuming the Township remains the secondary emergency responder). An agreement will be developed between each of these agencies and the agreement shall be reanalyzed after 10 years to address future discrepancies or changes between service calls and emergency service payments. The estimated cost of this annual payment is \$308,500.

5.29 Act 51

Section 1c(a) of Public Act 51 of 1951 as amended, (MCL 247.651c(a)) provides that incorporated cities and villages having a population of 25,000 or more shall participate with the Michigan Department of Transportation in the cost of opening, widening and improving, including construction and reconstruction of state trunkline highways within the incorporated limits of said cities and villages (see **Table 5.29.1**). Based on the city of Port Huron's population, their match requirement is 8.75% of MDOT's match requirements (typically 20% for all federal-aid funding).

As part of comments received on the DEIS, the city of Port Huron requested that their Act 51 participation requirement be waived or minimized to the greatest extent possible. MDOT has determined that depending on the type of funding utilized and the project elements which are deemed Act 51 eligible, the city's Act 51 match requirement could range between \$500,000 and \$1.9 million.

Given the extraordinary nature of this international facility, the scope of its impact on city infrastructure and its unique reliance on toll revenue, MDOT will credit the city of Port Huron for the value of the city street infrastructure that will be vacated by the plaza expansion project. The city streets to be vacated as part of the plaza project include:

Table 5.29.1 City Streets to be vacated due to plaza project

Street	Pavement (SFT)	Street Length (FT)
13th Ave	4816	154
12th Ave	19424	588
11th Ave	20362	20362
Church St	26015	795
Elmwood St	25001	625
Harker St	15453	390
Mansfield St	51616	1304

Based on its valuation of the city's surrender of those rights of way for the Blue Water Bridge Plaza project, MDOT will credit

up to \$707,000 against the cost participation otherwise required from the city under Act 51. If the city's cost participation obligation otherwise equals, or is less than, \$707,000 the city will be deemed to have met its obligation by its surrender of those rights of way; no payment will be made to the city for those rights of way as they will continue to serve a transportation purpose.

Table 5.29.2 Cities Required to Participate in Accordance with Act 51 PA 1951

2000 Federal Census		
Cities Required to Participate in Accordance with Act 51 PA 1951		
12.5% Participation		
Greater than 50,000 population	Ann Arbor Battle Creek Dearborn Dearborn Heights Detroit Farmington Hills Flint Grand Rapids Kalamazoo Lansing Livonia Pontiac	Rochester Hills Royal Oak Saginaw Southfield St. Clair Shores Sterling Heights Taylor Troy Warren Westland Wyoming
11.5% Participation		
40,000 – 50,000 population	East Lansing * Kentwood* Lincoln Park Midland*	Muskegon Novi* Portage Roseville*
8.75% Participation		
25,000 – 40,000 population	Allen Park Bay City Burton Eastpointe** Garden City Holland Inkster	Jackson Madison Heights Mount Pleasant** Oak Park Port Huron Southgate Wyandotte
* City has changed participation range ** New participating city *** East Detroit name changed to Eastpointe Ferndale is no longer participating		

5.30 Outstanding Project Enhancement Issues

Outstanding Issues: The Project Enhancement Mitigation Group reached agreement on many of the enhancement and mitigation issues raised in the DEIS. However, there were several issues that MDOT, FHWA, GSA, CBP and the local stakeholders could not reach agreement on. The following list provides an overview of the outstanding enhancement and/or mitigation issues and the reason consensus could not be reached.

1.) Form a Payment in lieu of taxes (PILOT) program/local community gets a percentage of the Blue Water Bridge tolls:

MDOT does not support the creation of an ad hoc program to simply provide payment in lieu of taxes to a community hosting a transportation facility. If MDOT provided payments in Port Huron, similar payments would be expected in every community throughout the state which hosted a State Trunkline. MDOT believes the mitigation and enhancement measures developed for this project sufficiently address all of the direct and indirect impacts of this project.

The authorizing toll legislation requires that tolls be dedicated to the maintenance and operations of the bridge, plaza and connecting roadways. Individuals and businesses paying these tolls expect that generated revenue be managed by the state of Michigan to assure efficient operations and the infrastructure maintained in good operating condition. Any diversion of these funds for non-transportation uses would be in violation of the best interests of the entire State of Michigan

2.) Formalize a bypass around the plaza connecting the community of Wadham's with Keewahdin and M-25:

MDOT believes this enhancement/mitigation request is not consistent with the project's purpose and need and extends beyond any direct or indirect impacts of the corridor and plaza expansion.

What is Level of Service?

Level-of-service is rated A to F and is a qualitative measure of the operational traffic conditions as perceived by a motorist. LOS A is best and represents free flow traffic conditions. LOS F is perceived by the average motorist as heavy congestion. Think of LOS like school grades; "A" is great, and "F" is failing.

As discussed in **Section 5.18** MDOT believes through careful maintenance of traffic planning efforts, travel time delays during construction of this project will be manageable. Furthermore, MDOT does not believe this enhancement can be justified based on the anticipated costs and social, economic, and environmental impacts associated with creating a new bypass route.

3.) Widen M-25 from the plaza north to Krafft Road, including widening the bridge over the Black River Canal to accommodate one additional lane in both directions:

MDOT believes this enhancement/mitigation request is not consistent with the project's purpose and need and extends beyond any direct or indirect impacts of the plaza expansion. A very preliminary analysis was conducted of this local enhancement request. The results of this analysis concluded:

- M-25 north of the plaza generally operates at Level of Service C conditions during the existing peak periods;
- Future operating conditions are likely to operate at acceptable levels of service;
- Large floodplain impacts along the Black River would be encountered near the intersection of M-25/Black River Canal;
- Right-of-way needed along M-25 to accommodate a widening of M-25 to 7-lanes would be substantial; and
- This widening would likely result in the displacement of an additional 30-40 businesses and residences within the city of Port Huron/Fort Gratiot Township.

As discussed in **Section 5.18** of this FEIS MDOT believes through careful maintenance of traffic planning efforts, delays from this project will be manageable and will not result in the types of delays that would justify the costs and social, economic, and environmental impacts associated with widening M-25 north of the plaza.

MDOT will continue to coordinate with the city of Port Huron as cost estimates and the project's financial plan is finalized. The department also commits to continued discussions

between the local community and other state agencies that may have grants or other resources to bring to the Port Huron community that could help offset the financial impact of this project.



The following section called the Project Mitigation Summary “Green Sheet” discusses the specific mitigation and enhancement commitments that will be implemented for this project. Without the benefit of detailed design plans and data, some elements of the mitigation are presented as concepts and will be refined during the design phase. Agency coordination will continue throughout the remaining phases of the environmental clearance and design stages. More mitigation measures may be developed if additional impacts are identified during the design phase.

Specific project mitigation and enhancement measures will be included on the design plans and permit applications.

Project Mitigation Summary “Green Sheet”

March 2009

Final Environmental Impact Statement and Section 4(f) Evaluation For the Recommended Alternative

**Blue Water Bridge Plaza Study in the City of Port Huron
and Port Huron Township
St. Clair County, Michigan**

This project mitigation summary “Green Sheet” contains the project specific mitigation and enhancement measures considered at this time. A list of Community Enhancements that are over and above what is required mitigation for this project is included in Section VI of this Green Sheet. An updated “Green Sheet” will be prepared and included in the Record of Decision (ROD). These mitigation items and commitments may be modified during the final design, right-of-way acquisition or construction phases of this project.

Per Executive Directive No. 2007-22, all buildings constructed on the plaza and at the Welcome Center will meet LEED certification (minimum 26 points) for the GSA leased facilities. MDOT will strive to obtain Silver LEED certification.

I. Social and Economic Environment

a. *Aesthetic and Visual Resources* - The exact appearance of the Recommended Alternative is still conceptual. MDOT is currently working with its federal, state and local stakeholders will develop an Aesthetic Design Guide (ADG) to identify the proposed mitigation and project enhancement measures to be implemented during the design and construction phases. The ADG will provide an overall design direction for both the corridor and plaza project areas to assure on overall continuity is achieved between these two work elements.

Mitigation of aesthetic and visual impacts may include some of the more common measures such as:

- Developing and applying corridor standards for selective vegetative clearing and thinning, earthwork, landscaping or other methods of screening
- Incorporating architectural features into the design of retaining walls, security walls, and other structures
- Utilizing directional lighting and creative berm concepts at the plaza, new welcome center, and along highway corridors
- Applying colors and/or textures to help soften the visual appearance of the proposed structures and hard surfaces
- Developing project signing themes that can be implemented to boost tourism opportunities
- Developing specific mitigation measures to reduce any adverse impacts on the visual character on the neighborhood and business adjacent to the expanded plaza
- Developing guidelines for utilizing the appropriate plant species, including where appropriate native species, to develop sustainable landscapes

b. Recreation - MDOT will coordinate with Port Huron Township regarding the access road for Township Park No. 1 and No. 2. Access to both parks will be maintained during all hours of operation. The Recommended Alternative requires a narrow strip of park property (approximately 0.34 acre) along the edge of the property that now borders the interstate off-ramp. FHWA has determined that the potential impacts to Port Huron Township Park No. 1 are *de minimis*. No material or equipment storage on park property will be allowed during construction. Mitigation will include returning excess property to the township park and landscaping the potential drainage easement so that it is an aesthetically pleasing natural area.

The navigation channel in the Black River will be maintained under the I-94/I-69 Bridge to accommodate boaters using the city of Port Huron Riverside Boat Ramp.

c. Relocations - During the design phase, MDOT will further refine the specific property requirements associated with the Recommended Alternative along both the corridor and the plaza. As a result there is a possibility that relocations identified within the FEIS may be reduced. For example, if during the design phase it is determined that only a small corner of a property is required, then it is likely not to require relocation. The Recommended Alternative requires 125 residential, 30 businesses and 1 community facility. MDOT will determine the availability of comparable, decent, safe and sanitary housing for eligible displaced individuals. Appropriate measures will be taken to ensure that all eligible displaced individuals are advised of the rights and benefits available and course of action open to them. No relocations will occur until it is shown that comparable housing is available. Replacement housing must meet decent, safe,

and sanitary requirements in accordance with Federal law. Every effort will be made, through relocation assistance, to assure property owner rights are upheld in the highest professional means possible.

II. Natural Environment

a. *Stream Crossing* - A Construction Staging Plan will be provided to the contractor that will define construction access to the Black River Bridge piers. The Construction Staging Plan will be prepared and reviewed with MDEQ prior to any Act 451, Part 31 (Floodplains) and Part 301 (Inland Lakes and Streams) permit application. Coordination regarding the Construction Staging Plan will also occur with the U.S. Army Corps of Engineers and U.S. Coast Guard prior to the submittal of federal permit applications. The plan will include soil erosion/sedimentation controls including dewatering operations, temporary causeway/access pad design, installation/removal phasing, and stream navigation requirements (signing and lighting). No work will be done in the Black River or Stocks Creek between March 15th and June 30th to provide protection for fish spawning. Work may be done behind an enclosed cofferdam installed prior to the start of the protection dates. Coordination with the MDNR Fisheries Division will occur during the design phase to determine project drainage in the vicinity of the Black River and Stocks Creek.

b. *Wetlands* - The Recommended Alternative will impact 3.24 acres of palustrine emergent wetland and 1.12 acres of palustrine forested wetland. Using the 2 to 1 mitigation ratio for forested and 1.5 to 1 ratio for emergent, scrub-shrub, and open water wetlands the Recommended Alternative will require a total of approximately 7.1 acres of wetland mitigation. The wetland mitigation site is proposed to be located on MDOT owned property north of the welcome center. No public access will be permitted from the welcome center or West Water Street to the mitigated wetland site. Once the mitigated wetland is constructed the site will be protected by a permanent conservation easement to provide for the permanent protection of the natural resource functions and values of the mitigation site

c. *Floodplains* - The Recommended Alternative will require fill within the 100-year floodplain of the Black River. The Recommended Alternative will require approximately 625 cubic yards of fill. The MDEQ requires compensatory storage if more than 300 cubic yards of fill material is placed in the 100-year floodplain.

To ensure that all environmental and hydraulic impacts associated with the floodplain crossings of the Recommended Alternative are minimized, further evaluation of crossing options will be conducted during the design phase. This will include an examination of bridge spans and approaches, median widths,

and side slopes. The analysis will consider existing and proposed conditions, and will determine the necessary and proper bridge types, openings, lengths, and locations of abutments and piers, to minimize or eliminate floodplain impacts.

d. *Water Quality* - Roadway run-off will be treated by maximizing the use of vegetated buffers (300 foot minimum) for drainage conveyance and minimizing the direct discharge of bridge run-off. Disturbed sanitary sewer lines will be restored to pre-construction condition. Any disturbed groundwater wells will be properly abandoned.

Stormwater concepts have been developed that discharge the proposed plaza stormwater to the existing city system. An oil separator system will be used to provide pollutant removal (oil and solids) from stormwater.

e. *Threatened and Endangered Species* - No work will occur in wetland areas adjacent to Stock's Creek between mid-October and the end of March in order to protect potential winter hibernating habitat for the spotted turtle. During construction, thorough searches will be conducted for the turtle within the work area as they nest in mid-June. Any turtles found will be relocated to an appropriate safe area.

III. Cultural Environment

a. *Historic Resource* - The E.C. Williams House will be directly affected by the Recommended Alternative, and as a result MDOT will relocate the E.C. Williams House. The proposed relocation area of the E.C. Williams House is an MDOT owned parcel located on Elmwood Street in Port Huron. MDOT has proposed relocating the house from its historic location as a way to preserve the structure. SHPO has concurred that relocating the house would be preferred over demolition. Mitigation requirements for documentation and other measures can be found in the Memorandum of Agreement (MOA) found in Appendix B of this FEIS.

IV. Hazardous/Contaminated Materials

a. *Project Contamination* - A Project Area Contamination Survey (PACS) was performed for this project. Further investigation of contaminated sites and hazardous materials in the Study Area will be necessary to ensure the safety of workers during construction, prevent any future migration of existing subsurface contaminants, and address potential liability associated with the purchase of those parcels.

Any structures removed for the project will be assessed for asbestos-containing materials and lead-containing materials before demolition. A Worker Health and Safety Plan will be prepared if any of these materials are identified.

MDOT will also coordinate with the MDEQ Water Bureau and the Waste and Hazardous Materials Division when limits of excavation or disturbance of bottom sediments is determined in areas of known river, stream, or lake bottom sediment contamination. Coordination could include testing of bottom sediments within the project area, reviewing results with the Water Bureau to determine if any contamination exists, and reviewing results with the Waste and Hazardous Materials Division to determine if any special disposal methods will be required.

V. Construction

a. *Maintaining Traffic* - A Motorist Information Plan (website and temporary electronic message signs) will be developed and implemented during construction to identify lane closures and alternate routes. Coordination with local officials will occur to facilitate emergency service and school bus routes. Access to residences and businesses within the project area will be maintained during construction.

b. *Visual Impacts from Construction Activities* – To the greatest extent possible MDOT will require that any construction staging area that abuts a residential neighborhood or active commercial businesses be fenced so that views to the interior of the site are screened.

c. *Construction Vibration* - Where pavement must be fractured, structures removed, or foundation piles driven, care will be taken to prevent vibration damage to adjacent structures. Contingent upon property owner approval, MDOT in consultation with the selected construction contractor will make an assessment as to which structures will have basement surveys completed. MDOT will determine during the design phase which structures will be offered basement/foundation surveys. Monitoring will occur before, during and after the construction phase. Vibration impacts are not expected at this time.

d. *Recycling* - Recycling programs will be used if they are provided by the community, and do not compromise maintenance or security

VI. Enhancements

Much like mitigation, project enhancements seek to reduce the short and long-term impacts of a project on the host community(ies). While mitigation measures

are usually defined by legislative statute or interagency agreements, enhancements are those items that get added to a project that are over and above and beyond the mitigation required by law. Enhancement elements are often developed as a response to community input. Enhancements may or not be funded by the Federal Transportation Enhancement Program.

a. *Air Quality* - MDOT will work with contractors on an operational agreement to control air pollution during construction. A construction emissions plan may include actions such as: retrofitting off-road construction equipment; limiting the age of off-road vehicles used in construction projects; minimizing engine operations; restricting construction activities around certain more-sensitive receptors, such as the residential areas; using diesel particulate traps and oxidation catalysts; and, using existing power sources or clean fuel generators, rather than temporary power generators. The Contractors will institute fugitive dust control plans per MDOT Standard Construction Specifications under Section 107.15A and 107.19.

MDOT will work with SEMCOG, MDEQ, and the private sector and the community to create an action plan that includes short term and long term objectives aimed at reducing fugitive dust, diesel truck idling, fuel consumption, or diesel emissions to limit PM_{2.5} emissions in the area within one mile of the plaza. The action plan will identify priorities for future federal aid eligible transportation projects through programs such as Congestion Mitigation and Air Quality (CMAQ) and the Midwest Clean Diesel Initiative. These activities will be implemented during design and construction phases and sustained through the maintenance and operations of the facilities. Activities could also include outreach efforts to inform commercial operations and residents of air pollution control strategies. The actual projects will be generated from the community and its partners who will develop project proposals to implement these strategies.

b. *Local Circulation and Access* - The Michigan Department of Transportation has incorporated several enhancements into the design of the Recommended Alternative which improve local circulation and access to the Port Huron community. These enhancements were developed as part of continued coordination efforts with the city of Port Huron, Port Huron Township, and St. Clair County. The following section describes the proposed enhancements that MDOT commits to adding to the project:

Full Access Lapeer Connector Interchange: MDOT will reconstruct the existing partial I-94/I-69/Lapeer Connector interchange to provide full access from all directions of I- 94/69. Currently no eastbound I-94/I-69 to southbound Lapeer Connector movement or northbound Lapeer connector to westbound I-94/I-69 access is provided. MDOT as part of the Recommended Alternative will acquire

the necessary right-of-way and construct the necessary infrastructure to provide these missing movements. These improvements will improve access for emergency responders as well enhance economic development opportunities. The estimated cost of this project enhancement is \$4,400,000.

Realignment of relocated Pine Grove Avenue north of Hancock Street: MDOT's original alignment for the realignment of Pine Grove Avenue continued north on the existing M-25 connector alignment. In consultation with the city of Port Huron and Port Huron Business Coalition, the alignment was modified to connect back into existing Pine Grove Avenue just north of Hancock Street. This modification will provide improved access and visibility to existing business located north of the plaza. The estimated cost associated with additional right-of-way and construction materials to make this project enhancement is \$2,800,000.

M-25/Pine Grove Avenue Traffic Signal Synchronization Study: MDOT completed a traffic signal optimization study for M-25/Pine Grove Avenue in February 2006. This study recommended signal timing changes to improve the flow of traffic on this important north/south corridor within the Port Huron community. Following completion of the plaza project, MDOT commits to completing a similar follow-up study to determine if signal timing changes need to be made along M-25. MDOT estimates the cost of this study and necessary implementation measures at \$150,000.

Fund the Development and Installation of a Local Wayfinding Program: Working with the city of Port Huron, MDOT will fund the development and installation of a local wayfinding program designed to increase access and awareness of key local tourism destinations. MDOT will work with city staff to design appropriate signage and make the necessary installations to assure visitors can find their way from the expanded plaza facility to key local destinations as well as key transportation corridors (i.e., M-25, I-94/69,). All sign installation will occur once the plaza has been completed. MDOT estimates the cost of this program to be \$100,000.

c. Non-motorized Circulation - The Michigan Department of Transportation has incorporated several enhancements into the design of the Recommended Alternative which improve non-motorized access and circulation between the city of Port Huron and Port Huron Township, and connectivity with other existing non-motorized systems. These enhancements were developed as part of continued coordination efforts with the city of Port Huron, Port Huron Township, and St. Clair County. The following section describes the proposed non-motorized enhancements that MDOT commits to adding to the project.

Non-Motorized Crossing of the Black River: MDOT will construct a 14-foot non-motorized crossing on the south side of the newly expanded I-94/I-69 Black River Bridge. This will be a multi-directional facility and will be designed to accommodate both pedestrians and bicyclists. The path will connect with the existing sidewalks along Water Street and the newly constructed non-motorized facilities along relocated Pine Grove Avenue. The estimated cost of this project enhancement is \$3,000,000.

Non-Motorized Connection from 10th Avenue to the St. Clair Parkway: MDOT will support the submittal of a local enhancement application to fund a new non-motorized connection from 10th Avenue to the St. Clair Parkway system (under/near the existing Blue Water Bridge). The estimated cost of this project is \$500,000.

d. Economic Development - The Michigan Department of Transportation has incorporated several enhancements into the project that are designed to improve economic and community redevelopment opportunities within greater Port Huron. The following section describes the proposed economic and community development enhancements that MDOT commits to adding to the project.

Economic Development Plan: MDOT will fund the development of an Economic Development Plan. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. The economy of Port Huron and St. Clair County is changing; globalization and new technologies continue to accelerate the rate of that change. With an Economic Development Plan in place, St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

This county-wide economic development strategy will consider the economic conditions of the region, capture the essential elements of any earlier economic development plans for the community, and identify strategies and specific actions of importance to the region's economy. The goal is to improve the economic prosperity of the region, to define a plan that builds on the region's strengths including the transportation network, the proximity to international markets, the workforce, and other factors that make this area an exceptional place to live and work. The plan will also identify areas of concern that should be considered going forward and the goals and actions that the community should collectively pursue. The St. Clair County Economic Development Alliance will serve as the local coordinating agency for this effort. The estimated cost of this plan is \$220,000.

Fund Economic Development Experts and Services: MDOT commits to fund up to \$1 million for economic development services to fund the implementation of the aforementioned plan. An agreement will be developed with an appropriate local agency that will be responsible for using these funds to implement key strategies that are developed as part of the economic development plan. The estimated cost of this project enhancement is \$1,000,000.

Fund a local visitor center addition: In collaboration with the Greater Port Huron Chamber of Commerce, MDOT will fund an addition to the Chamber's office for the purposes of housing a local visitor center. This facility will be used to disseminate local tourism information and promote the tourism and economic development opportunities which exist within the Port Huron community. MDOT commits up to \$300,000 to be used to help defray construction costs associated with the facility which could house such uses as retail space for limited Blue Water merchandise, a community kiosk used for virtual community tours, and limited conference space for international business meeting and training opportunities. The estimated cost of this project enhancement is \$300,000.

Continue Coordination with Community Assistance Team: MDOT commits to continue coordination efforts with other state and federal agencies to bring additional resources to the greater Port Huron community. Such examples include coordinating with the Michigan Economic Development Corporation, the Michigan State Housing Development Authority, the Michigan Department of Labor and Economic Growth for job training opportunities and the Michigan Department of Environmental Quality to determine if any of these agency's existing programs, grants, or resources can be applied to future redevelopment opportunities.

e. Land Use and Zoning - MDOT has incorporated the following enhancement in order to minimize the impacts and costs on the city of Port Huron associated with pursuing innovative redevelopment strategies for the area surrounding the plaza. The following section describes the proposed land use and zoning services which MDOT commits to adding to the project.

Model Master Plan/Zoning Ordinance Updates: As there will likely be some area surrounding the expanded plaza that will be deemed excess property, MDOT will fund the development of a model ordinance and Master plan update for the area immediately adjacent to the expanded plaza. Redevelopment in established urban areas such as the area around the existing plaza can be difficult. This analysis will assess whether the city's existing Master Plan and Zoning Ordinance need to be modified to support infill and redevelopment opportunities and increase economic competitiveness for the city of Port Huron.

Innovative redevelopment tools such as creating a unique overlay or corridor zones around the expanded plaza area could also be examined. MDOT will provide funding to prepare the assessment and the model Master Plan and Zoning Ordinance updates. The city of Port Huron will be responsible for implementing any of the recommendations that are developed from this effort. The estimated cost of this effort is \$50,000.

f. *Emergency Services* - MDOT has incorporated the following enhancement into the project designed to assure emergency services required on the plaza do not place an unfair burden on local emergency response providers.

Payment for Emergency Response Services: MDOT currently provides an annual payment to the city of Port Huron of \$200,000 for emergency response services on the plaza. MDOT also pays Port Huron Township \$5,400 annually as a secondary emergency responder on the plaza.

In order to address the possibility of increased risk associated with future traffic increases coming across the expanded plaza, MDOT commits to annually reimburse the city of Port Huron \$300,000 for emergency services provided on the expanded plaza (assuming the city remains the primary first responder). MDOT will index this payment to the Consumer Price Index (C.P.I.) or a similar index for a period of 10 years to account for inflationary factors. MDOT also will commit to annually reimburse Port Huron Township \$8,500 for emergency services provided on the expanded plaza as a secondary emergency responder (assuming the Township remains the secondary emergency responder). An agreement will be developed between each of these agencies and the agreement shall be reanalyzed every five years to address future discrepancies or changes between service calls and emergency service payments. The estimated cost of this annual payment is \$308,500.

CHAPTER 6

PUBLIC AND AGENCY COORDINATION

A full discussion of all Public and Agency Coordination which occurred prior to the release of the Draft Environmental Impact Statement (DEIS) is provided in **Chapter 6** of the **DEIS**. The Federal Highway Administration (FHWA) and the Michigan Department of Transportation (MDOT) are required to solicit ideas and input from people and organizations that may be affected by, or have regulatory authority over, the project. FHWA and MDOT have accomplished this through the use of various tools and methods. These tools and methods will continue to be employed as this project progresses through design and construction.



Public Involvement is an important part of the study

The Study Team utilizing a Context Sensitive Solutions (CSS) approach conducted an extensive process of public and stakeholder engagement to obtain input, identify local concerns, revised proposed alternatives and better understand the impact of alternatives to the community and natural environment.

6.1 Overview of Public and Agency Coordination Prior to the Release of the DEIS

Notice of Intent to Prepare an EIS: The federal agency that is preparing an EIS is required to officially notify the public when the study will begin. The FHWA satisfied this requirement by publishing a *Notice of Intent* in the Federal Register. This notice was issued January 12, 2005 and published in the January 27, 2005 issue of the Federal Register (Vol. 70, No. 17, Pg 3974).

Scoping Meetings: Three scoping meetings took place over the course of this study. The scoping meetings focused on identifying key environmental issues to be considered for the project. An initial meeting was held June 19, 2003 to describe the study and conduct a site tour of the plaza and surrounding area. A second meeting to present three alternatives and gain consensus from the group was held July 27, 2004. July 19,

2005, a third meeting was held to discuss study updates, scheduling, and the need to convert the study from an Environmental Assessment to a more detailed EIS.

Federal Agency Meetings: In addition to the scoping meetings, several meetings were held with the Bureau of Customs and Border Protection (CBP) and the General Services Administration (GSA) to gain input on plaza operations and receive comments on the proposed alternatives. Details regarding the meetings are listed in **Table 6.1**.

Table 6.1 Federal Agency Meetings

Date	Location	Topic of Discussion
September 16, 2002	Port Huron, MI	Current plaza activities
November 12, 2002	Port Huron, MI	Plaza needs/opportunities
July 17, 2003	Port Huron, MI	Alternatives review
February 10, 2004	Lansing, MI	Alternatives review
April 22, 2004	Port Huron, MI	Alternatives review
September 9, 2004	Washington, DC	Alternatives refinement
December 2, 2004	Detroit, MI	Alternatives and traffic modeling
August 8, 2005	Indianapolis, IN	Security for Practical Alternatives
October 24, 2005	Port Huron, MI	Security for Practical Alternatives
February 13, 2006	Lansing, MI	Project Coordination with MDOT, FHWA, CBP and GSA
June 12, 2006	Detroit, MI	Alternative development
August 24, 2006	Port Huron, MI	Alternative development

Stakeholders Advisory Committee: A Stakeholders Advisory Committee was formed to provide expertise and input on all pertinent issues related to the plaza study. The Advisory

Committee consists of a core group of stakeholders representing plaza inspection agencies, local and state officials, Canadian officials, private firms, and key representatives from the local community. The Advisory Committee held 13 meetings and was instrumental in: (1) defining the purpose and need for the project outlined in **Chapter 1 Why Are Improvements Needed?**, (2) providing input on how best to involve the public in the study process, (3) developing ways to measure the effectiveness of the proposed alternatives, (4) reviewing and refining the proposed alternatives, and (5) sharing specific agency concerns.

Initial Concepts Charrette: April 29, 2003, the Michigan Department of Transportation (MDOT) held a charrette with border crossing stakeholders for the Blue Water Bridge Plaza. The purpose of the Initial Concepts Charrette was to encourage communication and understanding between stakeholders, identify concepts that address study objectives, identify potential cost-saving measures, and identify new issues of concern.

Local Agency Coordination: A variety of local agencies participated in the Stakeholders Advisory Committee Meetings. In addition to those meetings, more than 40 individual meetings were held with local agencies to understand agency issues and concerns and review proposed concepts.

Public Information Meetings: The Study Team held six public information meetings to provide study information and receive comments from the general public. MDOT notified people by issuing press releases in the local newspaper, conducting interviews with local media, and mailing informational brochures to more than 400 households located in the vicinity of the plaza. Brochures for each meeting were also distributed to key city, township and county offices and to churches in the Study Area. All of the meetings were held at transit and disabled accessible facilities in Port Huron, Michigan. The meetings were held in a large hall using an open forum format. Members of the public could visit stations and discuss different aspects of the proposed project (study process, traffic, environmental constraints, etc.) with project team members. All attendees were encouraged to fill out



Coordination with local agencies



Public Meeting #3

comment forms. **Table 6.2** provides the details of each of the public information meetings.

Table 6.2 Public Meetings Held

Meeting	Date	Location	Number of People Who Signed In	General Purpose
Public Meeting No. 1	March 13, 2003	Port Huron Municipal Office Center	70	Introduce the study and study process
Public Meeting No. 2	September 23, 2003	Michigan Technical Education Center	287	Present Illustrative Alts.
Public Meeting No. 3	May 17, 2004	Michigan Technical Education Center	146	Present Updated Alts.
Public Meeting No. 4	February 9, 2005	St. Clair County Community College	213	Present Refined Alts.
Public Meeting No. 5	September 26, 2006	Girl Scout Building	224	Present new Alt. City West
Public Meeting No. 6	December 7, 2006	Girl Scout Building	118	Present Alts. for I-94/I-69 corridor

Community Involvement Workshops: Three Community Involvement Workshops were held to assist the Study Team in incorporating the values and visions (aesthetics, land use, community, etc.) of Port Huron area residents into the planning process. The purpose of these workshops was to gather information about what characteristics participants valued in their community and neighborhood and how they would like to see the area surrounding the project look and feel. Two workshops focused on the on-site Study Area and

the third workshop focused on the off-site Study Area. Four additional Community Involvement Workshops are planned for the Blue Water Bridge Project.

Meetings with Specific Groups: Informal meetings were held with individuals or local special interest groups that had specific concerns or interests in the study. These meetings allowed for an exchange of ideas and focus on issues of special concern. Meetings were held with:

- U.S. Representative Candice Miller
- State Senator Jud Gilbert
- Staff members for State Representative Steve Ehardt
- Staff members for U.S. Senator Debbie Stabenow
- Staff members For U.S. Senator Carl Levin
- Ross Bible Church
- local Chambers of Commerce

Following their election, State Representatives Phil Pavlov and John Espinoza attended several project meetings. The Study Team also met with the several local business owners, and customs brokers.

Local Project Office Hours in Port Huron: Beginning in March 2007 MDOT held regular office hours on the first and third Friday of each month from 10:00 am-2:00 pm. Members of the Study Team were available to answer questions regarding the ROW acquisition process, the NEPA process, and answer other project related questions.



Community Involvement
Workshop



Community Involvement
Workshop

6.2 Overview of the Official Public Hearing

The public hearing for the Blue Water Bridge Plaza Study was held October 9, 2007. The public hearing provided an opportunity for the Study Team to share with the public information about the study and allowed the public to voice concerns and opinions regarding the Blue Water Bridge Plaza Study in Port Huron, Michigan. The hearing also allowed for one-on-one interaction with Study Team members and an explanation of the study for the public through exhibits and presentations. A court reporter was also made available. The public hearing took place during the 120-day public comment period for the Draft Environmental Impact Statement.

Two formal project presentations were given at the public hearing. Three videos were shown as part of the presentation one at 4:00 pm and another at 6:30 pm. The first was an overview of the DEIS. The second was a video statement by Robert Perez, Michigan Director of Field Operations for U.S. Customs and Border Protection, focusing on CBP's perspective regarding the plaza study and the Draft Environmental Impact Statement. The final video provided a 3-D simulation and overview of the City West (Preferred) Alternative, identified in the Draft Environmental Impact Statement.

Upon arrival at the public hearing, attendees were given a general comment form, a public comment form and a speaker identification form to fill out stating their name and contact information. Participants not wishing to speak publicly were encouraged to fill out and submit a general comment form, speak to a court reporter, or comment via email, (or by utilizing) the project hotline. All questions and concerns raised at the public hearing and during the public comment period have been addressed in **Chapter 7 Comments and Responses** section of this Final Environmental Impact Statement.

Formal Public Comment: Upon release of the DEIS the formal comment period commenced. This formal comment period was extended from the typical 45 days to 120 days to allow all parties sufficient time to review the DEIS.


6.3 Public and Agency Coordination following the Public Hearing

Project Enhancement and Mitigation Meetings: As result of the comments received from the release of the DEIS, the Study Team formed a Project Enhancement and Mitigation (PEM) group with officials from the city of Port Huron, St. Clair County, Port Huron Township, the Federal Highway Administration, the General Services Administration (representing U.S. Customs and Border Protection), and MDOT. Also included were representatives from Senator Carl Levin's office, Senator Debbie Stabenow's office, U.S. Representative Candice Miller's office, and State Representative Phil Pavlov's office. This group was formed to assist in identifying mutually agreeable solutions to

anticipated project impacts associated with the proposed Blue Water Bridge plaza expansion. A full discussion of the Project Enhancement and Mitigation process and outcomes can be found in **Section 5.0** of this **FEIS**. **Table 6.3** provides the topics of each of the PEM meetings.

Agency Meetings: December 2007 thru June 2008 a series of meetings were held with CBP staff in Port Huron, Detroit, and Indianapolis, and included GSA staff from their Chicago office. MDOT project staff and Federal Highway Administration (FHWA) staff also participated in these meetings. The purpose of these meetings was to verify the Program of Requirements and look for ways to reduce the overall plaza size, if possible.

Local Meetings: The Study Team, including FHWA and GSA, attended the June 23, 2008 Port Huron City Council meeting. This was a meeting of the Port Huron City Council, St. Clair County Board of Commissioners, and Charter Township of Port Huron Board. This meeting provided the Study Team an opportunity to present the draft Recommended Alternative, provide an update on the project and allow the City Council, Board of Commissioners and Township Board an opportunity to ask questions. The public was allowed to attend the meeting. The meeting was also broadcast on the community's local cable network.



Charting the Vision: Port Huron

- What kind of economic future does Port Huron want?
- Begin with a desire to forge a positive outcome for the future
- Build a realistic plan considering advantages, challenges, trends and conditions

Table 6.3 Project Enhancement and Mitigation Meetings Held

Meeting	Date	Location	General Purpose
Meeting No. 1	February 2, 2008	City of Port Huron Office Building	Organizational and Orientation
Meeting No. 2	March 3, 2008	City of Port Huron Office Building	Economic and Community Development
Meeting No. 3	April 17, 2008	City of Port Huron Office Building	Local Access and Circulation Meeting
Meeting No. 4	June 12, 2008	City of Port Huron Office Building	Maintenance of Traffic and Presentation of Recommended Alternative
Meeting No. 5	July 17, 2008	City of Port Huron Office Building	Context Sensitive Solutions, Aesthetics and Misc. Mitigation Items
Meeting No. 6	August 21, 2008	City of Port Huron Office Building	ROW Impacts, Payment in Lieu of Taxes, Misc. Mitigation Items
Meeting No. 7	September 25, 2008	City of Port Huron Office Building	Delay Analysis
Meeting No. 8	October 16, 2008	City of Port Huron Office Building	Study Update
Meeting No. 9	November 20, 2008	City of Port Huron Office Building	Study Update

At the request of the Port Huron Chamber of Commerce, the St. Clair County Economic Development Alliance and Fort Gratiot Business Associations, project updates were given to both groups and an opportunity for questions and comments was also provided at these meetings.

As the project moves forward into the design and construction phases, MDOT will continue to provide updates to its local stakeholders.

Local Project Office Hours in Port Huron: Office hours were continued following the release of the DEIS. MDOT staff are available every first and third Friday of each month from 10:00 am - 2:00 pm at the Port Huron TSC. These office hours have been ongoing since March 2007 and provide the public with the opportunity to get answers to project related questions from Study Team members. Since the release of the DEIS, 114 visitors have attended office hours to discuss the project or their specific concerns with MDOT staff.

6.4 Agency Comments on the DEIS and Practical Alternatives to be Carried Forward

A complete listing of all comments received and responses to the comments is located in **Chapter 7.0**.

Introduction to Response to Comments on the DEIS

This section of the FEIS provides a summary of the comments received on the Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study along with the Study Team's responses. In August 2007, MDOT and FHWA distributed the DEIS to agencies and organizations on the official distribution list of agencies that typically have an interest in environmental documents. Copies of the DEIS were also sent to agencies/organizations that had requested a copy of the document, and/or that could be affected by improvements to the Blue Water Bridge Plaza.

MDOT and FHWA held an advertised public hearing to receive comments on the DEIS on:

October 9, 2007
3:00 pm – 8:30 pm
McMorran Place
701 McMorran Blvd.
Port Huron, Michigan

At the public hearing Study Team members made two presentations describing the NEPA process, the proposed project, the DEIS and key issues and impacts. Members of the public attending the hearing were given three different options for providing their comments:

- **Oral Testimony:** This testimony was documented by a court reporter during the public hearing presentations and is included in the official Blue Water Bridge Plaza Study Public Hearing Transcript which is on file at the Michigan Department of Transportation (MDOT).
- **Oral Statements:** Attendees were offered the opportunity to make statements in private which were recorded by a court reporter at the public hearing. The statements are documented in the Official Public Hearing Transcript which is on file at MDOT.
- **Written Statements:** Attendees were invited to submit written comments on cards provided at the public hearing or in letter form. The written statements are included in the official Blue Water Bridge Plaza Study Public Hearing Transcript which is on file at the Michigan Department of Transportation (MDOT).

The 120-day comment period for agencies and individuals to respond to the DEIS officially closed on December 10, 2007. The comment period included a 60-day extension which was requested by the city of Port Huron.

The Study Team responded to comments received on the DEIS by following the general guidelines developed by FHWA for implementing the National Environmental Policy Act (NEPA).

The Study Team completed written responses for substantive comments pertaining to analysis conducted for and documented in the DEIS. Comments agreeing with DEIS information or statements, general opinions, statements of fact or preference were not formally responded to in details, but are included in this section. The Study Team summarized comments that had similar or overlapping issues to reduce the number and length of repetitive comments received. The summaries help distill the essential points raised in the comments, thus enabling agency reviewers and ultimately the public; to better understand the issues that were raised. Responses were not drafted for statements of preference. The Study Team did not draft detailed responses for comments expressing a specific preference for one alternative over another.

Comments focusing on issues which require detailed design plans (i.e. soil issues, construction sequencing etc. were not responded to at this stage. These types of comments will be addressed in coordination with local governments and agencies during the final design phase of the project. The full text of all comments received can be reviewed in **Section 7.1** of this FEIS.

Many of the comments came in the form of letters from various agencies. The following list will assist with locating individual agency comment letters:

<u>Agency/Governmental Unit</u>	<u>Page Number</u>
United States Environmental Protection Agency	7-3
United States General Services Administration	7-3
United States Department of Commerce, NOAA	7-4
United States Department of the Interior	7-4
United States Department of Transportation, FAA	7-6
Ontario Ministry of Transportation	7-7
Blue Water Bridge Canada	7-7
State of Michigan, Department of Agriculture	7-7
State of Michigan, Department of Community Health	7-8
State of Michigan, Department of Environmental Quality	7-8
Southeast Michigan Council of Governments	7-10
United States Senators Carl Levin and Debbie Stabenow	7-16
United States House of Representatives, Candice Miller	7-16
State of Michigan, House of Representatives, Phil Pavlov	7-17
St. Clair County	7-18 thru 7-67
City of Port Huron	7-18 thru 7-67
Charter Township of Port Huron	7-18 thru 7-67
Charter Township of Fort Gratiot	7-18 thru 7-67
Southeastern Michigan Council of Governments	7-18 thru 7-67
Bridge Plaza Business and Community Coalition	7-18 thru 7-67

7.1 Response to Comments from Federal/ State Agencies and Officials

7.1.1 United States Environmental Protection Agency

1.) We have expressed disagreement with the following statement found in Section 3.9.4: “Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable quantitative estimates of MSAT emissions at the project level.” We continue to request that this statement be stricken from the EIS.

The Study Team understands EPA’s concerns with the statement. The text comes directly from the FHWA’s Interim Guidance on Air Toxics in NEPA Document, (February 3, 2006). FHWA requires that the statement be included in the document’s discussion on MSATs. FHWA is concerned about the health impacts of MSATs and with the assistance of MDOT is partnering with the USEPA on the National Near Roadway MSAT Study (<http://www.fhwa.dot.gov/environment/airtoxicsat/index.htm>). One location for the study is in southeast Michigan. This study may eventually lead to the ability to develop meaningful analyses and reporting of the transportation impacts of MSATs.

2.) LEED is the nationally-accepted benchmark for the design, construction, and operation of high-performance green buildings intended to maximize operational efficiency while minimizing environmental impacts. We encourage the FHWA and MDOT to commit to creating a sustainable building implementation plan for the Blue Water Bridge Plaza.

GSA requires all leases to be LEED certified. GSA will work with FHWA and MDOT to ensure these requirements are met during the design and construction phases of the plaza project. Per State of Michigan Executive Directive No. 2007-22, all buildings constructed on the plaza and at the Welcome Center will meet LEED certification (minimum 26 points) for the GSA leased facilities. MDOT will strive to obtain Silver LEED certification.

7.1.2 United States General Services Administration

1.) Visual Character, quality, and land use are not included in the Summary of Impacts table for the four alternatives. The table should be revised to include all potentially significant impacts.

The Study Team does not believe that certain, more descriptive information such as land use and visual quality impacts can be reduced to a bullet point on a table. The summary of impacts matrix provides a listing of numeric data regarding impacts of the alternative in the Study Area. Qualitative impacts such as visual character, quality and land use impacts are best discussed in the DEIS in Chapter 3 The Environment: What’s there Now and Project Effects.

2.) The figures in Appendix E are generally good and show relevant information, however the legend box on Figures E.3 - E.14 and E.18 - E.19 should be revised and expanded

to show all the graphic symbols and colors (lines, dots, crosshatch patterns, colors and shadings, etc.) depicted on the figures themselves. Currently, the information depicted on these figures is incomplete or ambiguous. It is hard to read the labels through the darker colors (reds and blues) in particular.

Comment acknowledged. Figures that were advanced to the FEIS have been updated and the legend box has been expanded to show all graphic symbols and colors.

3.) Given the amount of apparent "public controversy" (i.e., political and community concerns) involving the project (based on the February 5 and 27, 2007, letters to Governor Granholm from the city of Port Huron and Senator Levin, respectively), following the NEPA process to the strict letter of the law is essential for public acceptance and buy-in to the final selected alternative whether City West, City East, or the Township.

The Study Team has followed the NEPA process throughout the entire study process and will continue to do so until the project is complete.

4.) The Project Mitigation Summary ("Green Sheet") at the end of Chapter 5 could be a very useful tool in addressing and allaying public concerns about unavoidable impacts (especially adverse or detrimental ones) resulting from the project. Every effort should be made to ensure that this summary is as complete and up-to-date as possible.

Comment acknowledged. The Study Team agrees on the importance of keeping the Project Mitigation Summary up to date.

7.1.3 United States Department of Commerce, National Oceanic and Atmospheric Administration

1.) If there are any planned activities which will disturb or destroy geodetic control monuments, NGS requires notification not less than 90 days in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any required relocation(s).

There are no planned activities which will disturb or destroy known geodetic control monuments for the Blue Water Bridge Plaza Study.

7.1.4 United States Department of the Interior

1.) The E.G. Williams House has been determined to be eligible for the National Register of Historic Places as an excellent example of an early Queen Anne duplex residence, and because it was associated with E.G. Williams, a prominent local newspaper publisher. The property is also a Registered Michigan Historic Site. The evaluation considered two other action alternatives and the no-action alternative that would have avoided impacts to the

property; however, these were determined not to be prudent alternatives. The Preferred Alternative would result in an adverse effect determination with the Michigan State Historic Preservation Officer (SHPO). The SHPO has agreed in principle with the mitigation provided by FHWA and MDOT, but a memorandum of agreement (MOA) has yet to be executed.

The Department would concur with the FHWA that there appears to be no feasible or prudent alternative to the proposed project, if built as proposed, which would result in the loss of the eligible Section 4(f) property, the E.G. Williams House, or avoid the *de minimus* impacts to Port Huron Township Park NO.1. The Department would also concur that all measures to minimize harm to the property have been employed, under the condition that the mitigation proposed in the draft MOA is agreed to by the Michigan SHPO. A copy of the signed MOA should be attached to the final evaluation.

MDOT will perform the mitigation measures requested by SHPO in association with the relocation of the E.C. Williams House. Section 4.4.4 of this FEIS describes the mitigation measures to be carried out regarding the E.C. Williams House. An updated Memorandum of Agreement is included in this FEIS Appendix B. A final signed MOA will be included in the Record of Decisions (ROD) for this project.

2.) “Wildlife species that would be affected are common in the surrounding area, tolerant of noise and visual disturbances, and would easily relocate to similar habitats.” This statement would seem to indicate that habitat loss does not affect wildlife. Although suitable habitat may remain in the Study Area, it is likely occupied by many of the same common wildlife species that would be displaced from impacted areas. There is no information provided in the DEIS to show that these habitats presently are, or at the time of project construction are likely to be, so far below carrying capacity as to be able to absorb the displaced wildlife, assuming that individuals were able to locate and move to these other suitable habitats. This section should be corrected in the FEIS.

The Study Area is highly urbanized. Most of the habitat that would be affected by the project consists of the yards of homes and the edges of a couple of fields. It was not the intent to imply that habitat loss does not affect wildlife, but instead to indicate that the loss of habitat, such as the type of habitat in the Study Area, would not significantly affect the wildlife located within the Study Area. The statement has been revised to read: “... and may relocate to similar adjacent habitat.”

3.) In addition, this section of the DEIS does not include any discussion of potential effects to migratory birds. The Preferred Alternative would impact 4.36 acres of wetlands. We expect these wetland areas to provide habitat for a variety of migratory birds. Further, peregrine falcons have nested under the Black River Bridge as recently as 2005. Under the Migratory Bird Treaty Act of 1918, as amended, it is unlawful to take, capture, kill, or possess migratory birds, their nests, eggs, and young. We recommend this section in the FEIS address potential impacts to migratory birds.

On projects that involve work on structures over watercourses, MDOT reviews potential impacts to migratory birds that may make (or have made) nests underneath the bridges. During the design phase of the project, the Black River Bridge will be reviewed for past migratory bird nesting activity. If evidence of migratory bird nesting is discovered, coordination between MDOT (Environmental Section and Region Resource Specialist), MDEQ, and U.S. Fish and Wildlife Service will occur. A "Special Provision" that describes procedures for dealing with migratory birds will be included within the project specifications. MDEQ permits required to conduct work on bridges over water may include specific dates when work on bridges will be prohibited for the protection of migratory birds. There is documentation of the peregrine falcon nesting on the Blue Water Bridge, however not on the Black River Bridge. This bird is typically a high altitude nester (cliffs, tall buildings, bridges).

4.) Section 5.15, What Will Be Done To Ensure No Migratory Birds Will Be Impacted? (page 5-15): This section addresses mitigation measures for work on bridges over watercourses and indicates that coordination between the MDOT, the Michigan Department of Environmental Quality and the FWS will occur. We recommend expanding this list to include other Agencies that may have review or permitting authority, for example the U.S. Army Corps of Engineers and Coast Guard.

*The Study Team coordinated with the U.S. Army Corps of Engineers and U.S. Coast Guard during the development of the DEIS. Both agencies have permitting authority as it pertains to this project and we have added their agency names to **Section 5.14 What will be done to Ensure No Migratory Birds will be Impacted?***

5.) We also recommend Section 3.14.3 Will the Project Impact Any Plants, Wildlife, or Threatened and Endangered Species? in the FEIS include a discussion of other mitigation measures, such as scheduling construction activities or removing potential habitat before the initiation of spring nesting or after the breeding season has ended to avoid take of migratory birds, eggs, young, and/or active nests. We recommend including these mitigation measures in the Project Mitigation Summary "Green Sheet."

*A similar question was previously asked; please see the response in **Section 7.1.4**. Mitigation measures have been included in **Section 5.14 What will be done to Ensure No Migratory Birds will be Impacted?** in this FEIS*

7.1.5 United States Department of Transportation, Federal Aviation Administration

1.) If any replacement wetlands are to be located within 10,000' from a public use airport additional coordination with the FAA will be required to ensure that the proposed mitigation site does not adversely impact air safety.

The Study Team proposes building wetland mitigation sites on the northern part of the proposed new Michigan Welcome Center site. The nearest public airport is located six miles away. Consultation with FAA will take place should further wetland mitigation be proposed within the stated criteria.

7.1.6 Ontario Ministry of Transportation

1.) Customs processing capacity at the current plaza has had and continues to have a significant impact on the operations of Highway 402 within Canada. Passenger car and truck queues form on the westbound lanes of Highway 402 when the arrival rate of U.S. bound traffic exceeds the processing rate at the Blue Water Bridge Plaza in Port Huron. This has created a number of concerns for the traveling public and the community. We believe that the Preferred Alternative presented in the DEIS will significantly increase processing capacity at this crossing and result in traffic queues approaching the border being eliminated for all but the highest security conditions. We would encourage the Michigan Department of Transportation to proceed expeditiously with the implementation of the plaza improvements.

Comment acknowledged.

7.1.7 Blue Water Bridge Canada

1.) While U.S. bound traffic volumes were lower compared to the same period last year, delays in processing both commercial and passenger vehicles often exceeded two hours and at times were reported as three hours or more. The inadequacies of the present facility were a major factor in the inability for Customs and Border Protection (CBP) officials to process these vehicles in a timely manner. In particular the lack of inspection booths and secondary processing facilities restrict the ability of CBP to open more lanes when required.

Comment acknowledged.

2.) BWBC is pleased to note that the "City West Alternative" is designed so that commercial trucks entering the United States will be processed on the right side of the plaza. BWBC was required to implement a temporary "merge" as a safety precaution at the base of its span in order to eliminate the dangerous weave movements required by U.S. truck and cars after the last modifications to the U.S. plaza. The new U.S. plaza design will allow BWBC to remove this restriction and allow for a more free flow of traffic.

Comment acknowledged.

7.1.8 State of Michigan, Department of Agriculture

1.) Our primary concern, as it relates to this project would be potential impacts the project could have on properties enrolled under Part 361 of the Natural Resources and environmental Protection Act (NREPA), Public Act 451 of 1994, as amended (formerly Public Act 116 of 1974, the Farmland and Open Space Preservation Act), and on established county and inter-county drains. As noted in earlier correspondence, staff does not anticipate impacts on these lands or infrastructure; nor do we anticipate other social, economic and/or

environmental impacts from the project alternatives, as they relate to agriculture and the various functions of the Department.

Comment acknowledged.

2.) We have some vested interest in seeing that the requirements for an adequate inspection facility are met, as requested by USDA Animal and Plant Inspection Service, Plant Protection and Quarantine (USDA-APHIS, PPQ). We encourage you to continue to work closely with USDA-APHIS in developing an inspection station to meet their needs.

Comment acknowledged. The possible relocation of the USDA APHIS animal inspection facility on Wadhams Road is not part of the plaza project nor does its relocation meet the purpose and need for the plaza expansion.

7.1.9 State of Michigan, Department of Community Health

1.) We have determined that there are no healthcare facilities within the Study Area. There are a few healthcare facilities within a half mile of the Study Area but based on our research, we believe that any of the alternatives for the proposed Blue Water Bridge Plaza Expansion should have no impact on these or any other healthcare facilities under our jurisdiction.

Comment acknowledged.

7.1.10 State of Michigan, Department of Environmental Quality

1.) Wetland impacts range from 4.4 acres for the City East and City West alternatives to 10.4 acres for the Township alternative. A permit for these impacts will be required from LWMD, under Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Comment acknowledged. All required permits for the project will be obtained.

2.) Page E-19 Wetlands-states that replacement ratios for forested impacts are 10:1, and the ratios for emergent, scrub/shrub and open water are 2:1 Under Part 303; the replacement ratios are 2:1 for forested wetlands and 1.5:1 for emergent scrub/shrub wetlands.

The correction has been made in the DEIS. Wetland replacement ratios for the Blue Water Bridge Study are 2:1 for forested wetlands and 1.5:1 for emergent scrubs/shrub wetland. For the Recommended Alternative, MDOT proposes to construct 7.1 acres of replacement wetlands.

3.) The bridge crossing at Black River and the culvert crossing of Stocks Creek will be replaced. A permit will be required from the LWMD under Part 301, Inland Lakes and Streams and Part 31, Water Resources Protection, of the NREPA.

Comment acknowledged. All required permits for the project will be obtained.

4.) Page 3.11-3 Stocks Creek states that the existing 200-foot-long triple six foot diameter culverts will be replaced with a 210-foot-long 12-foot by 8-foot elliptical concrete culvert. MDOT should consult with the LWMD and the Michigan Department of Natural Resource to ensure the proper sizing of this crossing to allow for adequate fish passage.

MDOT will consult with the Land and Water Management Division (LWMD) of the Michigan Department of Environmental Quality and Michigan Department of Natural Resources (MDNR) during the design phase to ensure the proper sizing of the proposed 12' x 8' 210 foot-long elliptical culvert at Stock's Creek for fish passage. A hydraulic analysis was conducted for Stocks Creek which was used to help size the new structure. A permit is required for the new structure from the Michigan Department of Environmental Quality to ensure compliance with fish and wildlife regulations. Specific structure elements will be determined in the design phase of the project.

5.) Page 3.11-6 City West Alternative states that an oil separator system would be used to provide pollutant removal (oil and solids) from the stormwater. This mitigation component should be added to the mitigation Green Sheet.

This item has been added to the Green Sheet.

6.) Page 3.12-1 Floodplains. It is recommended that paragraphs two and four be re-worded as follows:

Paragraph 2-The floodplain is divided into two parts, the floodway which carries most of the flow during a flood event, and the floodway fringe which is an area of very slow moving water or "slack water". The floodway is the high hazard area during times of flooding.

These changes have been made in Section 3.11 of this FEIS.

7.) Paragraph 4-The State of Michigan's Floodplain Regulatory Authority, found in Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) requires that a permit be obtained prior to any alteration or occupation of the 100-year floodplain of a stream/drain with a drainage area of two square miles or more. The purpose of Part 31 is to assure that projects do not obstruct the flow of water and cause a harmful interference in the 100-year floodplain and that the floodway portion of the floodplain is not used for residential construction. Part 31 is enforced by the Michigan Department of Environmental Quality.

Comment acknowledged. All required permits for the project will be obtained.

8.) Page 3.13-6- Figures 3.13.1 and 3.13.2-The figures are confusing in that part of the wetlands are shown in yellow and part are in blue along Stocks Creek.

The error has been noted in Chapter 12 of this FEIS however the figure has not been updated as it has not been included in this FEIS.

7.1.11 Southeast Michigan Council of Governments

1.) In general, all of the proposed alternatives should result in reduced congestion and idling at the Blue Water Bridge and thus provide better air quality than would be experienced under a do-nothing scenario. However, more detailed information, directly comparing the different alternatives would provide a better understanding of the relative benefits and negative impacts of each alternative in relation to the others.

A qualitative PM2.5 hot-spot analysis has been prepared for this FEIS according to U.S. EPA and FHWA guidance. This is located in Section 3.3 of this FEIS.

The comment specifically references air quality and requests more detailed information comparing the alternatives to better understand the relative benefits and impacts of each alternative in relation to each other. Each plaza alternative has essentially the same traffic projects and plaza elements with the same number of primary booths and similarly sized secondary inspection areas. The movement of vehicles through the plaza is essentially the same for each alternative and traffic operations through the plaza would not change significantly from one alternative to another. Thus air quality impacts would be relatively the same as the congestion and idling reductions would be essentially the same for each alternative.

2.) The report states that “implementation of a construction emissions reduction plan may be considered” and lists a number of actions that may be included in this plan. The DEIS does not indicate if such a plan is to be implemented and when that decision will be made?

Section 5.4 of the DEIS document identifies MDOT’s best practices for minimizing air pollution and particulate matter during construction. Based on the air quality analyses completed for the proposed improvements, this project will not contribute to any violation of the National Ambient Air Quality Standards (NAAQS) and is not expected to have a substantial effect on MSATs in the region. MDOT’s 2003 Standard Construction Specification Sections 107.15(A) and 107.19 will apply to control fugitive dust during the construction and cleaning of haul roads. Additionally, MDOT will utilize Intelligent Traffic Systems, such as changeable message signs along the I-94/I-69 corridor to most effectively manage traffic operations and reduce long durations of idling where feasible during construction and operation of the new border plaza. For additional information, See Section 5.23, How will Air Pollutions be Controlled During Construction? of this FEIS.

3.) The section on Off-Road Construction Equipment references Tier II standards for non-road equipment. However, stricter Tier III standards began taking effect in 2006 and will

be fully phased in by 2008. These are the standards that should be met for off-road construction equipment.

Tier III standards have been phased in and will be followed during construction. MDOT will comply with Tier III level guidelines and practices. Section 5.4 of the DEIS documents MDOT's best practices for minimizing air pollution and particulate matter during construction.

4.) Current air quality status should focus on Southeast Michigan and St. Clair County rather than the entire state. It should talk about monitored levels of ozone and PM2.5 (annual and 24-hour) in St Clair County compared to other parts of the region and note recent trends in the data. There is concern over more idling concentrated in the plaza and roads heading to the plaza all of which currently occur in Canada. Reference should be made on the most recent emissions inventory data for these pollutants, not the data in the State's 2005 Annual Air Quality Report.

A carbon monoxide hot-spot analysis was performed for 2005, 2013 and 2030. The results are presented in Chapter 3.9.2 of the DEIS. The CO concentrations will decrease compared to existing conditions.

A qualitative hot-spot analysis for PM2.5 has been prepared with the results presented in Section 3.3 Air Quality of this FEIS. This analysis was prepared according to U.S. EPA and FHWA Guidance.

5.) SEMCOG agrees that a PM2.5 hot-spot analysis should be performed on the Preferred Alternative, following the federal guidance that was issued by EPA and FHWA in March 2006.

A qualitative PM 2.5 hot-spot analysis for the Recommended Alternative has been completed and is included in Section 3.3 of this FEIS, following U.S. EPA and FHWA Guidance.

6.) While validated models for predicting MSAT pollutant concentrations are not yet available, pollutant burdens can be quantified and compared between alternatives. We believe that a Tier III analysis, as described in FHWA's 2006 Interim Guidance on air toxic Analysis in NEPA Documents, is appropriate for this project due to the high level of truck traffic associated with the bridge plaza and the level of community concern regarding the project.

Tier III standards have been phased in and will be followed during construction. MDOT will comply with Tier III level guidelines and practices. Section 5.4 of the DEIS documents MDOT's best practices for minimizing air pollution and particulate matter during construction.

7.) Based on the conclusion from the DEIS, the City West (Preferred) Alternative would improve the flow of traffic and would provide adequate capacity for current and future traffic on local roads, freeway segments, and mobility through the plaza resulting in less vehicle queues and backups on the freeway network.

The City West (Preferred) Alternative adequately meets all of the requirements developed and identified in Table 2.3.1 Summary of Alternative Evaluation. The Preferred Alternative would address the potential congestion problem along the M-25 Corridor by improving the intersection capacity, adjusting traffic signal operations, adding turn lanes, and/or adding through lanes until low to moderate levels of congestion are achieved.

Comment acknowledged.

8.) The planned modification to the existing I-94/I-69 Bridge over the Black River widens it from four (4) lanes to nine (9) lanes through the Preferred Alternative. This improvement to capacity is expected to overcome the need for additional crossing over the Black River. However, there is question whether this capacity improvement does in fact address local community concerns. Further consultation is needed with community officials to address these concerns.

The proposed Black River Bridge would be expanded as described in the comment above. There are three dedicated lanes to Canada (eastbound) and three additional eastbound lanes for local traffic for a total of six eastbound lanes. These six lanes are needed to separate the local traffic from the international traffic, a key concern of local residents. There are three westbound lanes across the Black River, which is an adequate number of lanes for the 2030 forecast traffic volumes. These improvements to the Black River Bridge and I-94/I-69 will also provide the necessary infrastructure to support existing and future border pre-clearance programs such as FAST and NEXUS. MDOT believes this improvement fully satisfies the purpose and need for the Blue Water Bridge Plaza Study. Remaining local community concerns regarding the limited crossing of the Black River fall outside the scope of this study.

9.) **Local Road Traffic Impacts:** The DEIS does an adequate analysis of the freeway system, but needs clarification on number of items particularly to local roads and community impact. The key issues identified are as follows:

A corridor traffic progression analysis should be performed and provided in the Final Environmental Impact Statement since the Preferred Alternative would add two new signalized intersections and a roundabout (see Table 2.2.4) along Pine Grove Avenue. A stronger effort is needed to time the signals along Pine Grove Avenue, which continues to be a problem. The impact of introducing signalized intersections and a roundabout within close proximity should be discussed.

MDOT completed a traffic signal optimization report in February 2006. MDOT implemented several signal retimings as a result of this report. MDOT commits to completing a similar study once the project has been constructed to determine if signal timing changes need to be made along M-25.

10.) The report should clearly indicate the individual streets that will be closed as a result of the Preferred Alternative, as this would be a major connectivity issue for neighborhood around the plaza, particularly along 10th Avenue. The potential increase in traffic along 10th

Avenue and the intersection of 10th Avenue and Hancock Street should also be considered in analysis.

The Recommended Alternative realigns Pine Grove Avenue to the west closing the existing road under the plaza. The realigned roadway will curve around the proposed plaza from 10th Ave. to Riverview St. The new plaza requires some right-of-way (ROW) to be purchased along; north Scott Avenue, Mansfield Street, Harker Street, Elmwood Street, Church Street, and south Hancock Street. The remaining ROW on these streets will have Pine Grove Avenue access via Hancock Street or 10th Avenue. There is no anticipated traffic volume change due to the new plaza on 10th Avenue or the intersection of 10th Avenue and Hancock Street.

11.) On page 2.2-32, the report needs to specify what type of intersection control is proposed for the intersection of Lapeer Connector with the collector road.

No intersection control is proposed for Westbound Collector road traffic and those turning south on to the Lapeer Connector. For traffic heading north on the Lapeer Connector and turning west onto the freeway, the intersection control is a stop sign. In the future, if traffic warrants, this intersection could be signalized.

12.) On page E-25 (Figure E.16), the symbols that correlated to the legend appear to change in size. If different sizes indicate difference in features or performance measures, please explain, otherwise correct graphic.

This figure has not been included in this FEIS. The error has been noted in Chapter 12 of this FEIS however the figure has not been updated as it has not been included in this FEIS.

13.) It has been determined the welcome center would not be constructed in the median of the I-94/I-69 freeway as originally discussed, because of safety concerns and parking requirements. The build alternatives propose a new welcome center on vacant land in Port Huron Township approximately one mile west of its current location that is better suited to meet MDOT's design standards. It has also been identified in the study that MDOT will hold a public meeting to develop design aesthetics and landscaping treatments for the new welcome center. The public meeting should also include design aesthetics and landscaping treatments in and around the plaza itself.

MDOT will fund the development of an Aesthetic Design Guide and use the Context Sensitive Solutions (CSS) process to work with a local community advisory committee to develop and document architectural and aesthetic enhancements which will be incorporated into the design of the Michigan Welcome Center, the I-94/I-69 corridor, and plaza to the extent possible. These design items will be refined during the design phase of the project.

14.) The DEIS does not acknowledge receipt of the non-motorized trail plan developed by St. Clair County Parks and Recreation. The plan was developed in collaboration with County

Parks, Port Huron Township Supervisor, Port Huron City Engineer, and the Port Huron City Planner. The plan contains a city of Port Huron and Port Huron Township proposal for a non-motorized traffic bridge over the Black River connecting to Water Street on the west side and the Bridge to Bay Trail on the east side. The FEIS should reference the trails plan and indicate that the provision of a non-motorized crossing will move forward in the next stages of the project.

*MDOT has received a non-motorized plan to connect sidewalks along Water Street to the St. Clair River non-motorized network. MDOT will fund the construction of a non-motorized path across the Black River. The trail plan is referred to in **Section 5.25** of this FEIS.*

15.) The large plaza footprint has an impact on both the residents and businesses in the area. What are the implications on tax revenues (property tax base, income tax, and school tax) from the loss of residences, businesses, and school-age children? Further, what demands does the facility place on emergency first responders.

*Section 3.4, Economics of the DEIS presented the impacts on tax revenues due to the proposed plaza. The calculations have been updated for 2008 and are located in **Section 3.2** of this FEIS. Potential impacts to first responders were presented in **Section 3.2.12, Community and Neighborhood Impacts**, and in **Section 3.5, Public Safety and Security** of the DEIS.*

16.) The five-year construction time-period will cause disruption to adjacent residents and businesses. What efforts will be undertaken to mitigate such disruption.

*MDOT and the City recognize the importance of minimizing the traffic impacts to the local community as a result of this project. MDOT will coordinate with community stakeholders prior to the beginning of construction to assure impacts on residents and local services are minimized to the greatest extent possible. Specifically, MDOT will coordinate with Blue Water Area Transportation Commission and the St. Clair County Transportation Study Team, the St. Clair County Road Commission and the city of Port Huron, regarding Maintenance of Traffic concerns which affect their daily operations. **Section 3.17** of this FEIS **Construction Impacts** and **Chapter 5.19** discuss mitigation measures to offset impacts associated with the proposed project.*

17.) MDOT had indicated that they will provide purchasing, relocation assistance and advisory services for anyone whose property is needed for the project. However, concerning properties not taken by the new plaza, the project will reduce neighborhood cohesion in the blocks surrounding the existing plaza. That area would be divided as a result of the plaza expansion causing several local businesses to be relocated. This division of the neighborhood could potentially present a challenge to the local low-income population to find sufficient alternatives to the departed businesses of comparable types.

It should be recognized that the existing elevated plaza already serves as a physical and psychological barrier between properties and neighborhoods on either side.

As the DEIS described in Section 3.2.9, the larger scale of the Recommended (City West) Alternative will clearly increase the perceived and actual separation between properties on both sides of the plaza. The City West Alternative was selected in part because of the lesser perceived impact compared to the City East. In addition, it would provide improved north-south movement in Port Huron by offering two roadways (Pine Grove Avenue and 10th Avenues) instead of just one under the City East Alternative. Furthermore, the City West Alternative does not have the major north-south roadway in the area (Pine Grove Avenue) traveling under a substantial portion of the plaza, which is better from a security and visual barrier perspective.

While there will be changes to local circulation with the closure of some streets, Pine Grove Avenue and 10th Avenues will be maintained for local circulation, and will perform better for traffic movement than they would without the project. However, the Study Team recognizes that construction of the enlarged plaza could affect walk distances for persons that use transit and/or do not have a car. Many of the existing restaurants, small stores, and gas stations that surround the existing plaza would be replaced and serve a market that is created by the plaza and the neighborhoods that surround it. These types of businesses may relocate in the vicinity of the new plaza and will continue to provide services to those using the plaza and neighboring residents.

MDOT will conduct community outreach during the final design process to ensure that community aesthetic and visual concerns are considered. Aesthetic and Visual impacts will be considered through the application of Context Sensitive Solutions (CSS), which will attempt to ensure that the scale and aesthetic treatment of new roadways such as realigned Pine Grove Avenue are community friendly and welcoming to pedestrians.

18.) The build alternative scenarios make reference that the run-off would be treated prior to entering the water body. However, more information on the detailed stormwater management techniques should be provided. The following information reflects the requirements often found in a stormwater ordinance and should be incorporated into the design of the project.

- **There will be no direct discharges of stormwater run-off to the receiving water.**
- **The run-off from the project will equal pre-settlement run-off rates.**
- **Native vegetation will be used in all plantings.**
- **Ensure the proper vegetation type and amount in the grassy buffer areas to ensure that erosion does not occur from overland flow.**
- **Invasive species will be removed from the site.**
- **Keep the natural drainage ways intact.**
- **Infiltration and Low Impact Development (LID) practices will be utilized, when feasible based on appropriate soils, locations and pollutant removals. This includes porous pavement in low traffic volume areas, bioswales along roads, and bioretention in parking lots.**
- **Public education signage for LID techniques should be incorporated into the site.**

As stated in Section 5.7 of the DEIS, MDOT utilizes Best Management Practices (BMPs) to manage stormwater run-off. "Best Management Practices are policies, practices, procedures or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. "(Federal Register Vol. 65, No. 47) These BMPs include techniques and ideas similar to those listed in the comment above. MDOT will coordinate with the appropriate state and local agencies to develop final mitigation measures during the design and permit application phases.

7.1.12 United States Senators Carl Levin and Debbie Stabenow

1.) We encourage you to work with city and county officials to address their concerns and to explore opportunities to address the potential economic impact of the project on the surrounding communities. We urge all the agencies involved in this project to continue to work closely with the community of Port Huron to address these serious questions and issues.

In response to community concerns received from the release of the DEIS, the Study Team initiated a Project Enhancement and Mitigation (PEM) group comprised of representatives from the city of Port Huron, St. Clair County, Port Huron Township, federal and state elected officials, GSA, FHWA, and MDOT. This group met monthly from February through November 2008 to work through issues raised by the local community regarding the proposed plaza and corridor improvements. A summary of the group activities and outcomes can be found in Appendix C of this FEIS.

7.1.13 United States House of Representatives, Candice Miller

1.) Of particular concern has been the inability of the affected communities to receive answers to their questions from MDOT. This project is going to have a major impact on the city of Port Huron and surrounding municipalities. Local government leaders as well as residents should be relevant participants in this process to ensure that the new facility makes as little negative impact as possible.

MDOT held 9 public meetings or workshops and approximately 40 meetings with local officials prior to the development and release of the DEIS. Hundreds of local residents, business owners and officials attended these meetings.

In response to community concerns received from the release of the DEIS, the Study Team initiated a Project Enhancement and Mitigation (PEM) group comprised of representatives from the city of Port Huron, St. Clair County, Port Huron Township, federal and state elected officials, GSA, FHWA, and MDOT. This group met monthly from February through November 2008 to work through issues raised by the local community regarding the proposed plaza and corridor improvements. A summary of the group activities and outcomes can be found in Appendix C of this FEIS.

2.) The current plaza is simply inadequate to meet CBP's needs in a post-9/11 world. But my specific concern is that the traffic projections which have been used to develop the

Preferred Alternative are overly optimistic about future needs. It seems that basing future traffic growth on the rapid growth of the 1980s and 1990s will inevitably result in a plaza footprint far in excess of what may actually be required. Given the slow down of the domestic auto industry, the prospect of fewer Canadian trash trucks crossing the bridge, and newer technology to speed processing times, I have serious questions about whether a plaza the size of the Preferred Alternative is necessary.

*In response to community concerns received from the release of the DEIS, CBP re-evaluated the overall needs for the proposed plaza and worked with the Study Team to reduce the overall plaza space needed for CBP operation. As a result, the size of the proposed permanent plaza footprint has been reduced from the 65 acres in the DEIS to 56 acres in this FEIS. The size of the proposed plaza is not entirely dependent on future traffic, but instead is based on the facilities needed for CBP to complete their mission at the border. Additional explanation and justification for the plaza size can be found in **Chapter 1** and more specifically in **Section 1.6** of this FEIS.*

7.1.14 State of Michigan, House of Representatives, Phil Pavlov

1.) I write today in support of their concerns related to Section 1 of the DEIS and supporting technical reports. As mentioned, our community acknowledges that there is a legitimate need to improve the existing bridge plaza infrastructure in order to reduce processing delays, enhance security, and accommodate new technologies. However, since the new plaza will be a permanent fixture in our community, it is imperative that our concerns are addressed.

*As identified in this chapter of this FEIS, MDOT, FHWA, GSA, and CBP have worked diligently to address the comments of the community. In response to community concerns received from the release of the DEIS, the Study Team initiated a Project Enhancement and Mitigation (PEM) group comprised of representatives from the city of Port Huron, St. Clair County, Port Huron Township, federal and state elected officials, GSA, FHWA, and MDOT. This group met monthly from February thru November 2008 to work through issues raised by the local community regarding the proposed plaza and corridor improvements. A summary of the group activities and outcomes can be found in **Appendix C** of this FEIS.*

7.2 Regional and Local Government Comments

The Regional and Local Government Comments section addresses comments from the following agencies:

St. Clair County

City of Port Huron

Charter Township of Port Huron

Charter Township of Fort Gratiot

Southeastern Michigan Council of Governments

Bridge Plaza Business and Community Coalition

Some of the respondents presented more than one issue or concern. The Study Team prepared comment summaries due to the volume of comments received during the public comment period and the number of comments raising similar or overlapping issues. Comments are categorized under the following major headings:

- Aesthetics and Community Character
- Air Quality
- Alternatives Considered/Additional Alternatives
- Black River Bridge
- Community Impacts
- Drainage and Floodplain Concerns
- Economic
- Energy Issues
- Farmland
- Format of the DEIS
- General
- Hazardous Materials
- Health and Safety
- Historical Properties
- Improvements to Local Roads
- Justification for Plaza
- Land Use Issues
- Mitigation Efforts
- Noise
- Other Environmental Concerns
- Pedestrian and Non-motorized Access
- Project Design
- Project Funding
- Public Involvement and Coordination
- Public Transportation
- Right-of-Way Acquisition and Relocation Issues
- Security
- Signals and Signing
- Support and Economic Assistance to Community
- Threatened and Endangered Species
- Traffic
- Michigan Welcome Center
- Wetlands

7.2.1 Aesthetics and Community Character

1.) Many commenters expressed concern with regard to public input into the need for aesthetically pleasing landscaping, retaining walls, lighting and facilities. They recommended that the new facilities reflect the character and historical significance of the

city. They urged the design not resemble a “checkpoint” or warehouse, and asked that details for proposed aesthetic treatments be committed to as opposed to being described in generalities as to what “could” be proposed. Other recommendations were that noise barriers be more aesthetically pleasing than standard and reflect the “national and local economic significance of this corridor.”

MDOT will fund the development of an Aesthetic Design Guide (see Section 5.4 of this FEIS) which will describe and illustrate design intent, specific aesthetic design features and enough design detail to demonstrate the aesthetic commitments to be carried forward during the final design and construction phases of the project. MDOT and GSA commit to work with the local Context Sensitive Solutions (CSS) community advisory committee to develop a plaza design which reflects the regions heritage and identity. This process will be carried forward into the design and construction phases of the project.

Section 3.8 of the DEIS looked extensively at the visual impacts of the project. The Recommended Alternative (City West Alternative) would expand the existing plaza significantly and subsequently change the view surrounding the existing plaza location. This alternative will relocate Pine Grove Avenue to the west. The motoring public would no longer have the tunnel effect of the plaza over Pine Grove Avenue. Overall, the change in view for the Recommended Alternative would be most evident for those residents or businesses who are adjacent to the new plaza as the security perimeter of the new plaza would obstruct some of the view of the plaza and would likely be viewed as an improvement. MDOT will conduct community outreach during the final design process to ensure community concerns are considered to the greatest extent feasible. Aesthetic and visual impacts will be considered through the application of CSS, which will attempt to ensure that the scale and aesthetic treatment of new roadways such as realigned Pine Grove Avenue are community friendly and welcoming to pedestrians.

7.2.2 Air Quality

1.) One commenter expressed concern with PM_{2.5} emissions (particulate matter of less than 2.5 microns) and its potentially serious health affects on lungs, citing as examples, “asthma, difficult/painful breathing, chronic bronchitis” and potential associations of PM_{2.5} diesel emissions with lung cancer.

The Study Team conducted a qualitative hot-spot PM 2.5 analysis for the Recommended Alternative and included it in Section 3.3 of this FEIS, following U.S. EPA and FHWA Guidance. Section 5.4 of the DEIS documents MDOT’s best practices for minimizing air pollution and particulate matter during construction.

2.) A few commenters stated the DEIS contained inadequate disclosure of microscale air quality impacts. Specifically, commenters felt that there was not adequate carbon monoxide (CO) hot spot analysis completed at the Hancock Street/M-25 intersection and on the plaza itself. The commenters believe a hot spot analysis is needed for idling vehicles on the bridge plaza. The commenters believed that vehicle processing times that were withheld by CBP

for security purposes should be made available and utilized for CO and PM2.5 analysis as done for the Peace Bridge Plaza.

*Prior to commencing with the air quality analysis an Air Quality Protocol was submitted to the FHWA and U.S. EPA for approval. This protocol was followed during the preparation of the air quality analysis. The CO microscale analysis was performed in an area immediately adjacent to daily traffic queues where the general public will have access. A traffic delay analysis has been completed and is included in **Section 2.3.5** of this FEIS which provides information similar to the Peace Bridge Study.*

The Peace Bridge analysis was consistent with the construction of a new bridge and added capacity as proposed with the Peace Bridge project. In the case of the Blue Water Bridge, the existing bridges over the St. Clair River have adequate capacity for future traffic through the design year (2030), and thus no new border capacity improvements are proposed other than the future growth of traffic.

Regarding vehicle processing times, CBP officials have stated numerous times that the agency will take care to make information in National Environmental Protection Agency (NEPA) analysis and documents available to the public in conformance with its responsibilities under the Council on Environmental Quality regulations at 40 CFR 1506.6(f). In accordance with CEQ regulations, the Department of Homeland Security (DHS) will not disclose classified, sensitive security information, or other information that DHS otherwise would not disclose pursuant to the Freedom of Information Act (FOIA) (5 U.S.C. 552).

3.) A couple commenters believed additional or Tier III air quality analysis is necessary, including addressing mobile source air toxics for which validated predictive models do not yet exist.

*A similar question was asked previously; please see the response in **Section 7.1.11** comment 6.*

4.) A number of commenters requested additional studies be conducted including hot spot air quality within the project footprint for future years, and the development of a specialized methodology for modeling PM2.5. Information not in the DEIS was also requested including where baseline studies for air quality were conducted and in addition, St. Clair County monitored levels and trends for ozone and PM 2.5. SEMCOG felt that a PM2.5 hot-spot analysis should be conducted for the Preferred Alternative.

*A Carbon monoxide hot-spot analysis was performed for 2005, 2013 and 2030. The results are presented in **Chapter 3.9.2** of the DEIS. The CO concentrations will decrease compared to existing conditions.*

*A qualitative hot-spot analysis for PM2.5 has been prepared with the results presented in **Section 3.3 Air Quality** of this FEIS. This analysis was prepared according to U.S. EPA and FHWA Guidance.*

The forecast decreases in emissions are due to the reduction in idling vehicles for the Build Alternatives compared to the No-Build Alternative along with overall improvements in emissions standards for the trucks and cars that will use the new plaza between 2013 and 2030.

5.) Numerous commenters expressed concern over future air quality impacts, compliance with local, state and federal standards, and the steps MDOT will take in mitigating the effects and how and when they would be implemented. A few asked for confirmation if a construction emissions control plan would be prepared and asked how its implementation would be assured.

MDOT will work with contractors on an operational agreement to control air pollution during construction. A construction emissions plan may include actions such as: retrofitting off-road construction equipment; limiting the age of off-road vehicles used in construction projects; minimizing engine operations; restricting construction activities around certain more-sensitive receptors, like Southwestern High School (when it is in session); using diesel particulate traps and oxidation catalysts; and, using existing power sources or clean fuel generators, rather than temporary power generators. The Contractor will institute fugitive dust control plans as per MDOT Standard Construction Specifications under Section 107.15A and 107.19.

MDOT will work with SEMCOG, MDEQ, the private sector and the community to create an action plan that includes short-term and long-term objectives aimed at reducing fugitive dust, diesel truck idling, fuel consumption, or diesel emissions to limit PM_{2.5} emissions in the area within one mile of the plaza. The action plan will identify priorities for the future federal aid eligible transportation project through program such as, Congestion, Mitigation and Air Quality (CMAQ) and the Midwest Clean Diesel Initiative. These activities will be implemented during design and construction phases, and sustained through the maintenance and operation of the facilities. Activities could also include outreach efforts to inform commercial operations and residents on air pollution control strategies. The actual projects will be generated from the community and its partners who will develop project proposals to implement these strategies.

6.) Commenters questioned air quality emergency protocols and locations to place complaints or get additional information.

The Michigan Department of Environmental Quality, Air Quality Division has developed a system to notify the public of potential air quality health issues. More information can be found in the MDEQ's Annual Air Quality Report and on the MDEQ website (<http://www.michigan.gov/deq>).

Concerns regarding the Blue Water Bridge Project can be made 24 hours a day by submitting them to the project website (www.michigan.gov/bluewaterbridgeproject). Concerns and complaints can also be submitted by calling the toll-free project hotline (888-955-3515) from 8 a.m. to 5p.m. weekdays and after hours on voice mail. Comments can also be submitted at the Port Huron Transportation Service Center located at 2127 11th Avenue, Port Huron, Monday through Friday from 8 a.m. to 5 p.m. The project website will continue to be maintained through the life of the project and for some time after the project is

completed. Responses to comments can be further clarified through calling the hotline and speaking directly with a member of the Study Team. A project communication protocol will be created during the construction phase.

7.) One commenter noted the new stricter off-road construction equipment Tier 3 in should be met instead of the Tier 2 standards in the DEIS.

Tier III standards have been phased in and will be followed during construction. MDOT will comply with Tier III level guidelines and practices. Section 5.4 of the DEIS documents MDOT's best practices for minimizing air pollution and particulate matter during construction.

7.2.3 Alternatives Considered/Additional Alternatives

1.) One commenter believed that the DEIS “does not evaluate a reasonable range of alternatives, and does not provide adequate mitigation.”

The Blue Water Bridge Plaza Study DEIS provides a full examination of impacts of three build alternatives and the No-Build Alternative, and provides full disclosure of impacts. MDOT and FHWA worked with government agencies, stakeholder, and the public to develop, refine, and evaluate potential alternatives for improvements to the United States Plaza at the Blue Water Bridge. The alternative development process included several steps. Nineteen illustrative alternative concepts were developed and evaluated. Concepts were eliminated because they did not adequately address the purpose of and need for improvements.

Additional mitigation items have been included in this FEIS and are discussed in Chapter 5 of this FEIS.

2.) One commenter recommended “development of a water ferry system to move people up and down the Black and St. Clair Rivers.”

This strategy does not meet purpose and need for the Blue Water Bridge Study as defined in Section 1.0 in this FEIS. No enhancement of this nature is proposed as part of the plaza expansion project.

7.2.4 Black River Bridge

1.) A number of commenters believe the Black River Bridge improvements should be evaluated independently of the plaza project and/or expressed concern with potential delay in improvements to the Black River Bridge.

The replacement of the Black River Bridge is a priority for MDOT. In order for projects to have separate environmental clearances, the projects must have “independent utility,” meaning the projects must stand alone regardless of the outcome of the other project. The Black River Bridge size is dependant on the construction of a new plaza. The elevation of the new plaza also is tied to the Black River Bridge. Thus, the plaza and Black River Bridge must be included in one environmental study.

2.) A few commenters noted “that there was a Federal Register notice published on November 7, 2006 which indicated that the Black River Bridge portion of the project would be evaluated in a separate NEPA document. However, we are unaware of a subsequent notice being published to join the two projects back into the same NEPA document. If there was not a subsequent notice informing members of the public that the two projects have been joined back together, we are concerned that MDOT did not follow customary procedures in this regard and may in fact have failed to follow regulatory requirements. ”

FHWA and MDOT followed procedures and regulatory requirements regarding the combining of the Blue Water Bridge Project and the I-94/I-69 Corridor Study. On May 1, 2007 a Notice of Intent was published in the Federal Register that informed the public that in early 2007 after additional consultation with stakeholders, it was determined that the two separate studies should be merged into one and the I-94/I-69 improvements would be a part of the Plaza Environmental Impact Statement.

3.) A few commenters expressed concern in regards to accessibility across the Black River Bridge prior to, during and following construction as well as recreational access to the Black River.

The Black River Bridge will remain open throughout construction. As part of MDOT’s maintenance of traffic planning all efforts will be taken to minimize traffic delays. MDOT’s Work Zone Mobility Policy will be followed to minimize congestion within work zones. MDOT will work closely with the city of Port Huron and St. Clair County Road Commission to reach consensus on the final staging plan and maintenance of traffic provisions prior to the beginning of construction.

4.) One commenter inquired whether construction “will impede boat traffic on the Black River” and whether vertical clearances for boats passing under the bridge would be maintained or increased.

The Black River is a navigable waterway, which allows small boats to travel upstream beyond the Black River Bridge. The under clearance for the proposed bridge is either improved or remains the same as existing. In no instance is under clearance less than the existing bridge clearance. Boat traffic will not be impeded during the majority of construction. The one exception to this will be during beam placement, which will require no boat traffic passing underneath the cranes for 15-minute intervals. A communication plan will be developed during the construction phases of the project.

5.) Many commenters supported a non-motorized crossing over the Black River.

*MDOT commits to constructing a 14-foot non-motorized crossing on the south side of the Black River Bridge. North/south connections will also be provided across the Water Street Bridge. In conjunction with the city of Port Huron’s plans for providing non-motorized routes, this project also adds shared use of 10-foot sidewalks along the realigned Pine Grove Avenue. See **Section 5.25** of this FEIS for more information.*

7.2.5 Community Impacts

1.) A number of commenters concluded that the project would create a barrier (either perceived or real) between the north and south end of the community. Mitigation steps towards mitigating city division were also requested.

A similar question was previously asked; please see the response in [Section 7.1.11, comment 17](#).

2.) A few commenters asked about measures to ensure that enhancements to their life experience persist for the life of the improvement, and expressed concerns about the effect of the project on the quality of life.

Although “enhancing resident and visitor experiences to the greater Port Huron area” is not a specific purpose of the project, each alternative will provide a more efficient border crossing experience for both visitors and residents who use the border crossing, with expected shorter lines and crossing times (see delay analysis in [Section 2.3.4](#) in this FEIS). For local residents, there will be safety improvements from reduced back-ups of border crossing traffic that interfere with local traffic on the freeway. These improvements will remain for the life of the improvements with the development of project enhancement and mitigation specifics. These results are discussed in [Appendix C](#) of this FEIS and represent a substantial investment in the future success of Port Huron.

3.) Several commenters were concerned about the impacts to those neighborhoods not directly impacted by the proposed project. They were concerned these neighborhoods will suffer “cumulative impacts” including loss of value, as they become the new “front row” to the plaza. Others voiced concern with the prolonged timeframe of uncertainty of potential acquisitions.

The discussion in [Section 3.2.9](#) of the [DEIS](#) acknowledges that a few homes near the edge of the plaza from past expansions have experienced conversion to office use or are vacant. The Recommended Alternative may cause changes in the property values and property taxes for homes and businesses that remain in the vicinity of the plaza. Some parcels may increase in value due to improved access while other parcels may lose value due to noise or visual impacts. A property, which may have lower value as a residential property, may also have a much greater value as a potential business site. It is difficult to differentiate between the effects of the project and changes in values due to property improvements or changes in the local market. As a result, MDOT does not attempt to assess the potential changes in value for individual properties that do not need to be purchased for the project. MDOT does not compensate property owners for potential losses in property values due to their proximity to the project, nor is MDOT compensated for potential additional value created by the project.

Cumulative impacts are impacts on the environment resulting from the incremental impact of the project when added to other past, present, and reasonable foreseeable future projects. The impacts referred to in the comment are not cumulative impacts but instead are direct impacts of the plaza project. The DEIS does discuss these impacts in the [Land Use Section 3.1](#) (potential for future conversion of homes to

business uses), the *Community and Neighborhood Impacts Section 3.2*, and the *Economics Section 3.4*. As indicated in *Section 3.4* of the *DEIS*, MDOT does not engage in speculative assessment of the impacts of a transportation project on specific property values.

MDOT has put forward a number of mitigation measures, outlined in *Chapter 5.0* of this *FEIS*, to address land use, community, economic and visual impacts and formed a special Project Enhancement Mitigation team to address mitigation.

4.) Two commenters voiced concerns with the availability of alternative businesses and services within a reasonable distance of the affected residents.

There are no grocery markets, drug stores, doctor's offices or other such routinely-visited essential services being relocated as a part of this project. Many of the existing restaurants, small stores, and gas stations that surround the existing plaza and would be replaced serve a market that is created by the plaza and the neighborhoods that surround it. These types of businesses may relocate in the vicinity of the new plaza. If they do relocate in the vicinity of the expanded plaza they could continue to provide services to those using the plaza and neighboring residents. There are alternate like businesses on major routes accessible by transit customers near to the project area.

5.) One commenter asked how the alternatives would impact the provision of and access to social services in the surrounding neighborhoods, the city of Port Huron, and the neighboring townships.

*As described in *Section 3.2.10* of the *DEIS*, none of the alternatives would have a substantial effect on community services. The Free Methodist Church at the corner of 10th and Pine Grove Avenue is the only community type institution that would be displaced by the Recommended Alternative. MDOT will work with Blue Water Area Transit providers prior to the beginning of construction to ensure that there are no major impediments to transit accessibility for any transit-dependent populations. Pedestrian access to social services may experience minor impacts from re-routing.*

There are no emergency service providers within or immediately adjacent to the Study Area. Prior to the beginning of construction, MDOT will work with local emergency service providers to ensure access. As part of MDOT's maintenance of traffic planning all efforts will be taken to minimize impacts to critical north-south routes and emergency service access, to the greatest extent possible.

6.) A number of commenters expressed concern regarding the impacts to the demographic character and social interaction within the surrounding neighborhoods. A door-to-door survey was also suggested.

*A similar question was previously asked; please see the response in *Section 7.1.11, comment 17*. A door-to-door survey will not be completed for this project.*

7.) A few commenters inquired as to the availability of health and human service providers within the Study Area and how the relocation of families may impact services delivered at these centers.

*As described in detail in **Section 3.2.10** of the **DEIS**, the Recommended Alternative (City West) and the City East Alternative would both displace the First Free Methodist Church at the corner of Elmwood Street and 10th Street. MDOT will work with the church to find an adequate replacement property. No community health or human services facilities are being displaced. There are no health care facilities, emergency service providers, or community centers located in the Study Area.*

8.) Two commenters voiced concerns regarding the impacts on businesses within the project footprint and the loss of services they provide the community. There was also a question with regard to business access to Fort Gratiot Township associated with the Township Alternative.

The Recommended Alternative would require 30 businesses to be displaced. These businesses include gas stations, restaurants and offices that serve the local community as well as border crossing traffic. With the plaza expansion in Port Huron, many of these businesses may want to relocate to vacant areas near the plaza. This may create new pressures to convert homes in the nearby neighborhoods to business sites. There will likely be a period of time, after the businesses are displaced when local residents will have to travel farther to get to local businesses. Residents in the neighborhoods surrounding the plaza who walked to the nearby restaurants or filled up their vehicles at the nearby gas stations will likely have to travel a few extra blocks to get the same services.

***Section 3.4.6** of the **DEIS** notes that approximately 75 percent of the relocated businesses own their site while the others lease their location. The relocated businesses may choose to move to a different community or remain close to their current location. In accordance with federal law, MDOT can not direct relocated homeowners or businesses on where to relocate. Some changes in existing business patterns for residents and business owners in the vicinity of the plaza are inevitable with this number of business relocations.*

*Relocated businesses will be compensated as discussed in **Section 5.3** of this FEIS and the Conceptual Relocation Plan in **Appendix A**.*

9.) Two commenters were concerned with the benefit of the project to the Port Huron area, asking, will the “project add to resident and visitors experiences” to the area? Elaboration was requested on the benefits the improvements would provide to the city, state, U.S. and Canada.

The proposed project offers many benefits for residents, visitors, the State of Michigan and United States. Everyone will benefit from the improved security that a new border crossing will provide. Currently, CBP cannot complete their mission at the border due to limited space for required inspection procedures. The improvements also anticipate reduced traffic delays. Local residents and visitors will benefit

significantly from improvements made to the I-69/I-94 corridor which will separate local traffic from Canadian bound traffic. The delay analysis summary can be found in **Section 2.3.** of this FEIS. Improvements will also be made to the local road system surrounding the plaza, the Water Street interchange, and the Lapeer Connector. A new welcome center will provide visitors with a greatly improved facility with better accessibility and local information for visitors to the area. As a project enhancement MDOT has agreed to work with the Greater Port Huron Chamber of Commerce to create a local visitor center along Pine Grove Avenue. Based on the estimated construction cost the Study Team estimates that over 4,000 jobs will be created over a five year construction period. Lastly, MDOT is committed to creating a visually attractive project that meets the local character of Port Huron and will be developing an Aesthetic Design Guide as a result of Project Enhancement and Mitigation group meetings. This design guide will ensure that local preferences are incorporated into the final design and construction and a common theme is used throughout the project. **Section 5.0** of this FEIS discusses in detail the mitigation that has been committed to as a result of this project.

10.) Many commenters believed the following items should be included in the DEIS.

- **Provide a list of specific businesses that have relocated from the Detroit Metropolitan Region to Port Huron in the past 3 years.**
- **Provide data and recent trends in home sales for Port Huron from 2002-2007.**
- **What have the sales trends been and how have prices changed in the past five years?**
- **How many foreclosures are there in the city of Port Huron? How many foreclosures are there in the Study Area?**

The type of information requested is typically produced by regional planning agencies or retail organizations in the context of a much larger comprehensive planning initiative. Specific to the alternatives under study, the requested information would not add value to the assessment of the impacts associated with the project or to the associated mitigation efforts being proposed.

7.2.6 Drainage and Floodplain Concerns

- 1.) Two commenters concluded that “there is no analysis/information presented regarding potential floodplain impacts downstream from the crossing” and “relevant regulations require that potential projects such as this result in no harmful interference with floodwater elevations/conveyance. The DEIS does not provide enough details to confirm whether or not this threshold has been met.”**

*The existing and proposed bridges over the Black River have been analyzed with the results showing that the proposed water surface elevation immediately upstream will be 0.01 feet lower than for existing 100-year flood conditions. Immediately downstream of the bridges the existing and proposed water surface elevations are the same. Therefore upstream flooding conditions will be improved by the new Black River Bridge while not increasing downstream flood levels. This has been noted within this FEIS **Section 3.11.***

2.) One commenter questioned how impacts to the floodplain(s) would be mitigated and how the mitigation would be monitored for success, determined to be successful, and mitigated if not successful.

As discussed in Section 3.11 of the DEIS, fill material will be placed within the 100-year floodplain west of the Black River Bridge along both sides of I-94/I-69. Compensatory storage will be provided by lengthening the bridge over the Black River to ensure that the new bridge would not impact 100-year floodplain elevations. No adverse impacts are anticipated to floodplains as a result of the Recommended Alternative. To ensure that all environmental and hydraulic impacts associated with the floodplain crossings of the Recommended Alternative are minimized, further evaluation of crossing options will be conducted during the design phase. See Section 5.0 of this FEIS for a more detailed discussion of mitigation.

3.) Several commenters were concerned with the flow rates and quality of the stormwater discharge into the city of Port Huron's existing system. Commenters were also interested in how stormwater quality would be monitored.

Detailed stormwater detention plans will be developed during the design phase. MDOT commits to coordinate with the city of Port Huron to either utilize a portion of their stormwater sewer system or develop a separate system to manage all stormwater run-off associated with the expanded plaza.

4.) Several commenters were concerned with how the stormwater run-off would be detained and treated within the Study Area?

MDOT currently plans to treat and detain plaza and MDOT roadway run-off within MDOT ROW prior to out letting into the Black River. Best Management Practices consistent with MDOT's Soil Erosion and Sedimentation Control Manual will be used throughout the project during construction and after construction to ensure that sediment and other pollutants are removed. Currently there is no treatment of storm run-off from the plaza so the post-construction facilities will improve existing water quality.

In accordance with state and federal laws, stormwater detention basins will be constructed to control the rate of flow of stormwater so that there is no increase in the rate of flow of stormwater into water bodies or sewer systems. Currently the plaza drains into the Black River by two outlets and does not affect the city's storm system. The larger plaza footprint will require additional storm discharge to be accommodated by the plaza's system; however this will be accomplished by similar outlets as existing. MDOT will coordinate with the city of Port Huron and St. Clair County during the design phase to identify and design the appropriate stormwater detention facilities.

5.) Several commenters questioned, "What impact will changes in land use and construction have on the quantity and quality of stormwater that ends up in County and natural drains?" They also inquired as to "What Best Management Practices will be implemented to prevent degradation of stormwater quality?"

From a drainage perspective, changes in land use that increase the amount of paved area have the largest effect. Although the new plaza is in a mostly urban area, the new plaza and welcome center do increase the amount of paved area. As a result, the amount of stormwater run-off would increase. Best Management Practices consistent with MDOT's Soil Erosion and Sedimentation Control Manual will be used throughout the project during both construction and after construction to ensure that sediment and other pollutants are removed. These will be specified during the final design phase consistent with the final design. As currently planned the total amount of paved area for the new plaza site would increase but the new site also has a higher percentage of unpaved, impervious area within it compared to the existing. Currently there is no treatment of storm run-off from the plaza so the post-construction facilities will improve the quality of run-off.

Early hydrologic analysis shows that the flow rates will increase for the local project drainage areas due to the increase in impervious area and this increased flow rate will increase the peak watershed flow rate for Stocks Creek, the only affected county drainage facility. The local increase will largely pass through the Black River structure prior to the peak watershed flow rate. While stormwater run-off volumes will increase, releases to natural water courses will be mitigated by the use of detention facilities. Releases will be dispersed over time so as to avoid raising the backwater elevation of the Black River.

6.) Two commenters questioned whether coordination with the St. Clair County Drain Commission and County Stormwater Coordinator has begun. They also asked if the Drain Commissioner's Procedures and Design Criteria for Stormwater Discharge and Development plans had been reviewed, and how cumulative effects to drains and watercourses would be mitigated.

Meetings have been held with county officials including the County Stormwater coordinator. MDOT will coordinate with the city of Port Huron and St. Clair County regarding the design of stormwater detention basins.

7.) Three commenters were concerned whether the proposed developments were consistent with existing county and city's existing stormwater, land use and infrastructure plans. They also asked what steps would be taken to ensure the county Stormwater Permit and City/County Stormwater Pollutions Prevention Initiatives are followed.

MDOT currently plans to treat and detain plaza and MDOT roadway run-off within MDOT ROW prior to out letting into the Black River. MDOT only proposes to use the City's stormwater system for drainage from improvements to local roads adjoining or intersecting the project.

Currently the storm run-off from the plaza is drained by separate MDOT controlled 42" and 48" storm sewers located southeast of the Black River and I-94\I-69, not by the city's storm sewer system. Similar drainage outlets are anticipated with the location and size to be determined in design. The amount of storm run-off entering the city's system will be reduced by expanding the plaza footprint and rerouting the corresponding run-off to new MDOT controlled outfalls.

MDOT will work coordinate with the city of Port Huron and St. Clair County regarding the design of stormwater detention basins.

8.) One commenter is concerned with delay in completing the city's Combined Sewer Overflow project by the December 21, 2016 mandate due to uncertainty of the plaza expansion.

MDOT will continue to coordinate with the city of Port Huron during the design phase regarding the plaza expansion and its effect, if any, on the Combined Sewer Overflow project.

9.) One commenter noted that MDOT is required to receive permission from the city of Port Huron to release new stormwater into the city's storm sewer system.

Any proposed storm sewer connection associated with local road improvements will be coordinated with the city of Port Huron during design. Connections to the city's storm sewer system are not anticipated for the plaza facilities or I-94/I-69 improvements.

10.) One commenter stated that the County, City and local Townships have participated in the development of the Northeastern Watersheds Management Plan and asked how the proposed project will meet the goals and objectives of the Management Plan in compliance with National Pollution Discharge Elimination System (NPDES) Phase II stormwater regulations.

MDOT will continue to work with local officials throughout the design process to ensure the project will be in compliance with local, regional and state regulations. Best Management Practices consistent with MDOT's Soil Erosion and Sedimentation Control Manual will be used throughout the project during both construction and after construction to ensure that sediment and other pollutants are removed. There is no current treatment of storm run-off from the plaza so the post-construction facilities will improve existing water quality.

Potential hazardous material spills on the plaza are currently handled by an approximate 30,000 gallon tank under the plaza that storm run-off can be routed to in the event of a hazardous material spill during a rain event. A similar system will be developed in the final design for hazardous material retention. Detention facilities will be utilized to mitigate any increase in stormwater discharge.

11.) One commenter asked if there be sump pumps operated for potential high ground water levels and what would be the effects on adjacent properties.

During the design phase of the project geotechnical subsurface testing will be conducted in and around the area of the proposed plaza. If high groundwater levels are found, MDOT will use best management practices to design an appropriate plan to address the condition and work closely with local agencies to assess potential affects to adjacent properties, if any.

12.) Two commenters were concerned with proposed mitigation of the impacts and how wetland mitigation would affect water quality within the area.

MDOT plans to mitigate for the loss of wetlands from the project by constructing new wetlands north of the proposed new welcome center. One of the functions of wetlands and the corresponding results of wetland mitigation is to improve water quality through filtration and other means. Soil erosion and control methods appropriate to the final design of new wetlands will be used to protect water quality during the construction and establishment of the new wetlands. Chapter 5.10 summarizes mitigation proposed for wetland impacts.

7.2.7 Economic

1.) A few commenters requested more information in regards to job creation for minority and low-income groups, due to the project.

Job creation associated with this project will benefit the entire Port Huron community including minority and low income households. There is opportunity for construction, transportation, logistics and warehousing jobs resulting from the investment in the expanded plaza. In fact, the Port Huron area already has several facilities associated with customs brokers and trucking firms that operate on the plaza. The state will fund the development of an economic development plan for the city of Port Huron and area surrounding the plaza. The purpose of this plan is to build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future.

2.) Commenters asked what steps will MDOT take to ensure there will be no jobs lost as a result of each alternative under consideration.

All Practical Alternatives will have an impact on local employment as discussed in Section 3.4.5 of the DEIS. The only alternative that would not affect employment is the No-Build Alternative, which would not meet the purpose and need for the project and thereby compromise efforts to protect homeland security. MDOT cannot ensure that there would be no jobs lost as a result of the project, as some businesses that require relocation may opt to relocate out of the Study Area or simply close. In accordance with federal law, MDOT can not direct relocated homeowners or businesses on where to relocate. MDOT has been working with the community through a Project Enhancement and Mitigation (PEM) group. These discussions have included how to address project economic issues. Also see, comment 1, in Section 7.2.7 (above).

3.) Commenters asked if there are there assurances that local contractors or workers will benefit from construction jobs. Will the project comply with Davis Bacon and prevailing wage (depressed area) standards?

MDOT and FHWA will seek the best possible value from their investments when tendering construction projects and like any other project, there is no guarantee that local firms would be selected and local

materials will be used. Local economic benefits from construction would depend on the availability of local materials and workers and the ability of local contractors to competitively complete the job. The project will comply with the Davis Bacon Act and associated prevailing wage requirements.

4.) One commenter was concerned about the impact of construction on the local market and it's affects on jobs and spending, both during and post construction.

As described in Section 3.4 of the DEIS, the investment of construction dollars for the project will result in the creation of new construction and plaza related jobs. When an investment is made in the construction of a new facility, the companies and individuals receiving payment for building the project will in turn spend the money they receive on other goods and services. Companies and individuals receiving benefits in terms of reduced travel time and accident costs would also invest portions of these savings in the local and state economies. Based on the estimated construction cost for the City West Alternative of \$232 million, the Study Team estimates that 4,220 jobs will be created over a five-year construction period. Most of these jobs will be short-term construction related positions. Local job benefits from construction of the Recommended Alternative would depend in part on the availability of local materials and workers. MDOT seeks the best possible value from its investments when tendering construction projects and, like any other project, there is no guarantee local firms would be selected or local materials used.

5.) A few commenters requested more information on potential project-specific job impacts including updated data and job loss mitigation actions. One commenter asked what steps MDOT will take ensuring that jobs in other areas of the city of Port Huron and St. Clair County will not be adversely affected as a result of the loss or relocation of jobs in the Study Area. Will there be a multiplier effect for job loss in the city and the county? If so, what will that multiplier effect be and how was it determined?

MDOT cannot require displaced business to relocate in a specific location; however businesses are encouraged to remain in the area. Permanent job losses would only occur if relocated businesses chose to move out of the area or close down. No analysis was completed to determine a job loss multiplier effect. Indirect and cumulative impacts were discussed in Section 3.7 of DEIS.

As mitigation for the project the State of Michigan will fund the development of an economic development plan for St. Clair County to assist with the potential development of new businesses in the Port Huron area.

The purpose of the plan is to facilitate the development of an Economic Development Strategic Plan for the city of Port Huron and St. Clair County through the assistance of the Michigan Department of Transportation. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. With an Economic Development Strategic Plan in place St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies. With

a plan in place, it is possible to interest various agencies in funding key project elements in an overall economic revitalization effort for the community, particularly with the a well documented community profile and trends and condition report and certainly recognizing that there are impacts to the city from the expansion of the bridge plaza, and this expansion will ultimately benefit the entire nation.

6.) Numerous Commenters voiced concerns and requested additional information in regards to the project's potential adverse impacts on the local economy including businesses on M-25 in Fort Gratiot Township and downtown Port Huron. There were requests for additional information on local economic data and current trends; the economic effects of the alternatives, economic analysis methods, and how the alternatives would benefit surrounding communities.

*There are three basic impacts that a project of this type would have on the overall Port Huron area marketplace locations referred to in the comments. 1) Business or residential relocations as existing businesses or customers change locations, 2) Changes in access to businesses, and 3) The introduction of new traffic into the area that would increase the customer base for businesses. These issues are discussed in **Section 3.4** of the **DEIS** and **Section 3.2** of this FEIS. The section covering "Existing Business and Economic Activity" in **Section 3.4.4** of the **DEIS** was at a level of detail that is comparable or higher to most EIS documents and meets the requirements of technical guidelines for environmental documents. The type of information requested is typically produced by regional planning agencies or retail organizations in the context of a much larger comprehensive planning initiative. Specific to the alternatives under study, the requested information would not add value to the assessment of the impacts associated with the project or to the associated mitigation efforts being proposed.*

*For the City West and City East Alternatives, substantial impacts to the retail marketplace are highly localized in the vicinity of the project in terms of business and residential relocations and changes in access. These are discussed in **Section 3.4** of the **DEIS**. From a regional standpoint the business and residential relocations and changes in road access are not substantial enough to have notable impacts on other areas of Port Huron or Fort Gratiot Township. This is not a project which creates a new interchange or closes an interchange, or changes access and traffic patterns in a way that would substantially affect business patterns outside of the immediate vicinity of the project. As a result, there would be limited value in the type of market study data requested in the comments.*

7.) A few commenters inquired about project costs the city of Port Huron would incur. Two commenters recommended a crossing toll increase benefiting the City; another

MDOT is still in the process of finalizing the proposed funding mix for the plaza expansion. Thus, at this time it is difficult to predict what amount of Act 51 local participation will be required for proposed plaza/corridor improvements within the city of Port Huron. MDOT is aware of the city's concerns and commits to minimizing the Act 51 impacts to the city to the greatest extent possible.

MDOT does not support the creation of an ad hoc program to simply provide payment in lieu of taxes to a community hosting a transportation facility. If MDOT provided payments in Port Huron, similar

payments would be expected in every community throughout the state which hosted a State Trunkline. MDOT believes the mitigation and enhancement measures developed for this project sufficiently address all of the direct and indirect impacts of this project.

The authorizing toll legislation requires that tolls be dedicated to the maintenance and operations of the bridge, plaza and connecting roadways. Individuals and businesses paying these tolls expect that generated revenue be managed by the state of Michigan to assure efficient operations and the infrastructure maintained in good operating condition. Any diversion of these funds for non-transportation uses would be in violation of the best interests of the entire State of Michigan

8.) A number of commenters voiced concerns over the tax effects on the community, and requested current and future county, personal, business and consumer tax revenue amounts be given with respect to distance from the project. Taxable value methodology and results were also questioned.

The Study Team has added a discussion of sales tax revenue to the economics section of this FEIS. Forecasting the sales tax effects over 20 plus years resulting from a project, isolated from population changes and local, state, national and global economic change would by necessity, be very subjective. Local communities seldom prepare forecasts of the type from which a detailed, quantitative analysis could be based. From a state-wide, county-wide or city-wide perspective, there is little to indicate the project would result in a substantial long-term change in sales tax revenue. The change in revenue expected would likely be less than the margin of error of any type of numeric analysis. As such, a detailed, quantitative analysis would not provide added value.

MDOT's standard procedure is to look at tax base impacts from a jurisdictional perspective rather than distances from the project as it would not provide a useful basis for comparison. It is more accurate to look at tax base impacts from the perspective of a percentage impact of tax base rather than current dollar amounts of revenue, as local jurisdictions can adjust the amount of revenue up or down based on millage changes or other tax rates. The true project impact is on the base that is taxable, not the revenue amount that may change from year to year due to a variety of factors.

The property tax base impacts are estimates based on current available data. Estimates of property tax base loss were based on St. Clair County provided tax data for affected parcels including all of those shaded on the alternative exhibits provided in the DEIS and FEIS. For each alternative, the affected parcels assessed and personal property values were placed in a table and the sum of the total taxable value to be acquired was calculated. These property lists and data were discussed with local officials; listing of current assessed values of individual properties within the DEIS is not needed to discuss the alternatives.

As indicated in **Section 3.4** of the **DEIS**, MDOT does not engage in speculative assessment of the impacts of a transportation project on specific property values: "It is very difficult to isolate the effect of a transportation improvement on the value of particular parcels of land. A property, which may have lower value as a residential property, may also have a much greater value as a potential business site. It is also difficult to differentiate between the effects of the project and changes in values due to property

improvements or changes in the local market. As a result, MDOT does not attempt to assess the changes in value for individual properties that do not need to be purchased for the project. MDOT does not directly compensate property owners for potential losses in property values due to their proximity to the project nor does MDOT charge property owners for any potential additional value created by the project.

9.) Several commenters were concerned with the tax loss that will be faced by the City due to loss of property tax on homes, and income and school taxes from those relocating out of the area. The city of Port Huron calculated that “the city’s tax base would experience decreases in the 2% range” as opposed to the 1.4% local property tax impacts referenced in the DEIS. There were concerns with losses in water and sewer revenues and additional demands on emergency responders, and losses of school tax revenues. An estimate of pre and post-construction sales tax revenues was requested for Port Huron and Fort Gratiot, and some local agencies requested payment in lieu of taxes for tax revenue losses and anticipated additional emergency response needs.

*The Study Team coordinated with city of Port Huron including the City’s Assessor’s office in preparing the estimates of property tax base loss by the city of Port Huron. The tax base losses have been updated due to the slight reduction in plaza size along with growth in property values and now represent 1.6 percent loss to the city of Port Huron property tax base and 0.4 percent to the Port Huron Township property tax base as shown in **Table 3.2.1** in this FEIS. This is not total impacts to the City tax base. Other impacts are acknowledged although not specifically quantified in the document. The Study Team appreciates the input of the city of Port Huron in quantifying estimates of income tax loss and other potential losses and has added detail to this FEIS reflecting these impacts. It is important to recognize that all of these losses are worst case scenarios that assume the following:*

- Any business property impacted at all by right-of-way will be acquired.*
- All businesses and residents would choose not to relocate in the City and once relocated would not upgrade existing vacant or underutilized sites within the City.*
- The additional fees paid for utilities by MDOT and other agencies for the new plaza would not offset utility losses.*

There will be substantial opportunity to reduce and mitigate these impacts as the project proceeds into design. Agreements may be worked out with property owners where only a small part of the property is needed, allowing some businesses and homes to remain. This may substantially reduce both the property tax and income tax impacts of the plaza and losses in revenue sharing.

MDOT currently pays the city of Port Huron for both utilities and emergency service provision for the plaza and anticipates paying a greater amount (to be negotiated) as part of the new, expanded plaza. These are not issues that require compensation by other means.

MDOT does not support the creation of an ad hoc program to simply provide payment in lieu of taxes to a community hosting a transportation facility. If MDOT provided payments in Port Huron, similar payments would be expected in every community throughout the state which hosted a State trunkline.

MDOT believes the mitigation and enhancement measures developed for this project sufficiently address all of the direct and indirect impacts of this project.

The authorizing toll legislation requires that tolls be dedicated to the maintenance and operations of the bridge, plaza and connecting roadways. Individuals and businesses paying these tolls expect that generated revenue be managed by the state of Michigan to assure efficient operations and the infrastructure maintained in good operating condition. Any diversion of these funds for non-transportation or Blue Water Bridge operational uses would be in violation of the best interests of the entire State of Michigan.

10.) One commenter expressed concerns about the figures stated for the number of Canadians and Michigan residents crossing the bridge for work and asked what methodology was used to obtain this data.

The 2000 U.S. Census data was used to obtain information regarding the number of cross-border workers. However, this data only provided U.S. residents who work in Canada. The Study Team also contacted known employers of cross-border workers in the Port Huron area (i.e. hospitals) to obtain this data.

7.2.8 Energy Issues

1.) Two commenters asked what kind of energy would be used at the completed plaza and what measures would be taken to maximize energy efficiency.

MDOT and the U.S. General Services Administration, will be responsible for much of the design of buildings on the new plaza as GSA will be leasing the space for the federal agencies. GSA requires all leases to be LEED Certified. Under the Energy Independence and Security Act of 2007, plaza facilities must be constructed to meet or exceed specific energy use reduction targets. GSA will work with FHWA and MDOT to ensure these requirements are met during construction.

2.) A commenter expressed concern in regards to solar power interference and if nearby properties will be shaded as a result of the proposal?

All of the proposed plaza improvements for the Recommended Alternative are separated from existing development by roadway, so shadow effects of the proposed improvements are minimized. Security walls surrounding the plaza are also set back from the adjoining roadway. There will be some evening sunset shadow on the side yard or driveway sides of residences located on the east side of 10th Avenue between Elmwood and Church Streets. This occurs as a result of the east end of the plaza being elevated to enable 10th Avenue to remain open.

7.2.9 Farmland

- 1.) One commenter questioned how much prime and important farmland would be permanently rendered unavailable for agricultural activities as a result of this project?

As discussed in Section 3.17. of the DEIS, no prime or unique farmland exists in the project area. There will be no impacts to prime and unique farmland from the project.

7.2.10 Format of the DEIS

- 1.) One commenter was concerned with the format and appearance of the document.

The general format of this document attempted to make the DEIS reader friendly for the public. The white space (with the noted pictures or text) in the margins was used to better communicate key concepts to the reader. This format meets both the spirit and intention of NEPA in communicating and disclosing the environmental effect of the project.

7.2.11 General

- 1.) One Commenter voiced concern over the project justification of safety and security, and felt economy and shipping and distribution was the actual intention. The commenter also added the city council was present, listening and concerned.

Comment Acknowledged.

- 2.) A few commenters concluded that “A supplemental DEIS is needed to address the shortcomings of the present DEIS and to assure that there is full disclosure/adequate opportunity for public comment at this stage in the process. It is not acceptable for our concerns to be addressed only in the Final Environmental Impact Statement”.

The comments received from stakeholders are addressed in this FEIS. This is standard procedure for environmental documents and is the purpose of having both a DEIS (Draft) and FEIS (Final) as part of the process. Further comments on this FEIS mitigation are then addressed in a Record of Decision (ROD). FHWA has determined there is no need for a revised or supplemental DEIS.

- 3.) The supervisor of the Charter Township of Fort Gratiot referenced the “DLZ report as a part of” the township’s concerns. This report was prepared by a consultant retained to assess the DEIS and it asked a great number of questions on many subjects as reflected throughout this comments sections, including but not limited to traffic. The Marysville City Council expressed general comments regarding the process and the number of concerns regarding the project. The city council asked “that all issues be resolved before that construction occurs”.

Questions raised in the referenced document prepared by DLZ were distributed and were used by local stakeholders in many correspondences. These questions are responded to throughout this section by subject matter.

4.) A couple commenters asked if the project will increase recreational opportunities, including public access to lakes and rivers, and additional parks as relates to the regional objectives of the Northeastern Watersheds Management Plan and protecting water resources from degradation. One concern was additional education initiatives for the public.

MDOT believes that proposed corridor improvements will improve local access to the Black River by reducing congestion along I-69/I-94. In addition, a non-motorized path will be added to the new Black River Bridge which will provide pedestrian connectivity across the Black River and to Township Park No. 1 located along Water Street. An improved border crossing will also improve access to lakes, rivers, and state/provincial park related recreation opportunities on either side of the border.

No access is planned to the mitigated wetlands from the Michigan Welcome Center. This is in order to give the mitigated wetlands the highest opportunity to develop into and function as high quality wetlands. No additional public access is proposed, therefore no walkways or signage is proposed.

5.) A commenter asked what plans are in place for the snow removal from the corridor and plaza.

Snow removal along the I-69/I-94 corridor will be plowed using standard snow plowing procedures as it is today. Snow on the plaza is stockpiled and then trucked offsite to various MDOT own vacant lots. This reflects existing snow removal practices.

6.) Bay Mills Indian Community has proposed a casino development near the Blue Water Bridge plaza. We are concerned that the DEIS may not take into account this development, especially with regard to new local road infrastructure surrounding the plaza.

The traffic analysis conducted as part of the Blue Water Bridge DEIS can only account for development adequately committed to be shown in the Regional Long Range Transportation Plan and Model. The Study Team has designed the plaza alternatives and the local road network to accommodate uncertainties in future growth such as a new casino. The proposed roadway network has greater capacity than existing, especially the relocated Pine Grove Avenue which is expanded to 3-lanes in each direction from the existing roadway cross-section which has only 2-lanes in each direction. Should a casino be developed in Port Huron, it would likely result in higher traffic flows during evenings and weekends. The higher evening and weekend traffic associated with casinos would not have as much effect on the typical morning and afternoon peak hour traffic flows from workers traveling between home and work.

7.2.12 Hazardous Materials

- 1.) **Three commenters were concerned as to how environmental spills will be contained and public drinking water protected from such spills.**

Currently there is an approximate 30,000 gallon tank under the existing plaza that run-off can be routed to in case a hazardous material spill occurs. A similar system will be developed for the new plaza in the final design for hazardous material retention.

- 2.) **A few commenters questioned how local response agencies will alert the public to spills or the release of airborne hazardous substances and if fire suppression and other containment facilities would be utilized to avoid the entry of contaminants into air, sewer, and river systems.**

The protection of the population from threats related to hazardous materials is an important function of the border inspection plaza. The proposed new plaza will have numerous facilities to help detect and contain hazardous materials including storage tank facilities mentioned in the previous question. The notification measures which are currently in place for Federal Agencies and MDOT personnel to alert local emergency responders and officials will continue to be used in the event of spills or the release of hazardous substances. Any threat to surrounding neighborhoods will continue to be handled by local responders. Interagency safety and security meetings occur regularly and will be ongoing to ensure continued communication and cooperation regarding potential threats and emergency response and containment.

7.2.13 Health and Safety

- 1.) **Several commenters expressed concern regarding ground water wells and recharge areas and the impacts to the quality of groundwater in the Study Area during and after construction.**

*As discussed in **Section 3.11** of the **DEIS**, the Study Area does not contain any Sole Source Aquifers or Critical Aquifer Protection Areas as defined by the EPA under the authority of the Safe Drinking Water Act. No impact to groundwater resources are anticipated as a result of the Recommended Alternative.*

- 2.) **Three commenters were concerned with the facility plans for livestock inspection and quarantine and for the disposal of animal waste.**

No offloading inspection of livestock is proposed on the new plaza. There will be an elevated platform from which inspectors can view livestock on trucks, but offloading or quarantine of animals will continue to take place at the existing Wadhams Road facility.

- 3.) **Several commenters expressed concern regarding routes for emergency response vehicles and law enforcement. "Sufficient ingress/egress must be provided in the**

construction zone for emergency routes for law enforcement, fire and EMS.” One commenter asked, “Once completed, what are the expected routes for these agencies both within and through the project footprint? How will these changes impact response times, both during construction, and upon completion of the project?” There was particular concern with regard the potential EMS traffic delay on the new Pine Grove Avenue to areas north of the plaza.

As a part of MDOT’s maintenance of traffic planning efforts all efforts will be taken to minimize impacts to critical north-south routes and emergency service access, to the greatest extent possible. MDOT will follow ASHTO maintenance of traffic standards to ensure that emergency routes for law enforcement, fire and other emergency services will be easily accessible. Maintenance of traffic is discussed in more detail in Chapter 3.17 Construction Impacts of this FEIS.

MDOT will coordinate with emergency service providers prior to the beginning of construction and at the beginning of new phases of construction. Communication will be maintained throughout construction. Adjustments to emergency response plans will be developed based on project activity. The effects of response times were presented in Table 3.5.2 in Section 3.5 of the DEIS. The Recommended Alternative would have little effect on the response times for fire and police, depending on the service provider.

4.) Three commenters inquired if financial assistance would be available for a trauma center, and if new specialized response equipment would be necessary, and if so if funding assistance would be available.

No funds are proposed to construct a Trauma Center. It is not anticipated that emergency services will need to increase as a result of the new plaza. The Recommended Alternative will improve safety and security around the plaza and within the Study Area by improving local roadways and traffic flow on the plaza. None of the alternatives will require the relocation of any hospitals, fire, police or other emergency service facilities. The Recommended Alternative would have little or no effect on emergency service response times to and from the plaza. Emergency service along I-94/I-69 would be improved with better separation of local and plaza traffic.

5.) Three commenters asked if a clinical quarantine/isolation facility would be available on the plaza for persons suspected of being infected with communicable diseases. One expressed that such a facility should be equipped for emergency triage.

In the event of a person suspected of being infected with a communicable disease arriving on the plaza, the Center for Disease Control (CDC) and the County Health Department would be contacted, and if necessary a medical person would then be sent to make a determination on the need for and location of an isolation location. Dependent upon the individual’s stability at the time of contact, Emergency Medical Services (911) may be called. A clinical quarantine/isolation facility is not proposed for the new plaza.

6.) A few commenters questioned whether communication and intelligence sharing between Plaza agencies and local law enforcement agencies was adequate to provide safety and security to the plaza and welcome center. “What plans are in place and what accommodations will be made to foster interagency safety and security cooperation?” One asked if there would be a 24/7, manned phone number for local law enforcement to contact during construction.

MDOT will coordinate with local officials regarding the continued use of an 800 MHz communication system and accessibility/use of future intelligent transportation systems (ITS) technology being implemented along the corridor and the plaza. Interagency communication and intelligence meetings occur regularly with federal, local, state, county, and international law enforcement agencies and will be ongoing to ensure continued communication and cooperation in this area.

7.2.14 Historical Properties

1.) Several commenters expressed concerns regarding potentially historical or culturally significant structures or sites that may be within the proposed project footprint. They inquired as to how these sites would be preserved.

As noted in detail in Section 4.4 of the DEIS, the E.C. Williams House is the only impacted building determined eligible for the National Register of Historic Places. The Recommended Alternative will require the full acquisition of the property and relocation of the E.C. Williams House. Therefore, MDOT has proposed relocating the house from its historic location as a way to preserve the structure. The State Historic Preservation Office (SHPO) has concurred with this proposal as the best course of action. As additional mitigation measure additional research will be performed to document the house’s history.

The Study Team conducted an archaeological records check and field reconnaissance for the Study Area to assist with the identification of potential archaeological sites. In addition, deep testing was conducted on both sides of the Black River to test for cultural deposits that may be buried in the ground beyond the limits of normal testing. No evidence of prehistoric occupation or potential historic artifacts was found. The Study Team coordinated with the State Historic Preservation Office throughout the archaeological assessment.

7.2.15 Improvement to Local Roads

1.) A few commenters expressed concerns that current plans for future community development and the local transportation network were not “sufficient to address the future traffic increases.”

As discussed in Chapter 2 of this FEIS, the Study Team completed a detailed analysis of traffic levels, traffic forecasts, and transportation needs on the local network surrounding the existing and future plaza. The purpose and need for this project is not address the local road capacity issues See Section 1.0 for additional information on the purpose and need.

2.) A group of commenters believed that the expansion of Wadhams Road should be in place prior to the construction of the new Wadhams Bridge and that the Keewahdin Road (M-136) Temporary Business Loop should be improved and made permanent prior to the Plaza/Corridor construction. Two commenters requested for “MDOT to officially recognize the M-25 alternate route and work with the local road agency to contribute the resources necessary for long-term maintenance of this alternate route.” The synchronization of signals and expansion and safety improvements on M-25, north of the plaza were also requested.

The proposed Wadhams Road expansion and The Keewahdin Road Temporary Business Loop are not part of this project and are not directly or indirectly impacted by this study. MDOT has coordinated efforts with the St. Clair County Road Commission to ensure the construction of the Wadhams Road Bridge is completed prior to undertaking construction of the I-94/I-69 corridor and Blue Water Bridge Plaza. It is MDOT and the Road Commission’s goal to not have more than one river crossing closed at any time. MDOT plans to formally designate a bypass that would connect Wadhams Road with Keewahdin and M-25.

MDOT completed a traffic signal optimization report in February 2006. MDOT implemented several signal retimings as a result of that report. MDOT commits to completing a similar study once the project has been constructed to determine if necessary signal timing changes need to be made along M-25.

3.) Two commenters were concerned with the development and implementation of an access management plan along M-25.

An access management plan has already been developed for the M-25 corridor. MDOT will coordinate with the city during the design phase to assure any new access along relocated Pine Grove Avenue is consistent with the plan. MDOT is also committed to working with local partners to strengthen the provisions of this plan, if needed.

4.) A number of commenters expressed concerns regarding the proposed roundabout, along Pine Grove Avenue.

The roundabout shown in the DEIS along Pine Grove Avenue is no longer proposed. A boulevard type roadway is now proposed for Pine Grove Avenue which will allow for a Michigan left turn for vehicles to heading to the plaza from southbound Pine Grove Avenue.

7.2.16 Justification for Plaza

1.) A few commenters concluded that the DEIS does not provide “vital details” and justification for a new bridge plaza, specifically with regard to the need to “enhance border security.

*Additional details and justification have been added to **Chapter 1 Why are improvements needed?** of this FEIS. Specifically, **Section 1.6** has been added to provide further information.*

2.) While supporting the need to “enhance security and accommodate new security-related technologies” several commenters concluded that the DEIS did not provide enough information about how the projected traffic volumes related to the proposed plaza size. In particular, their concern was based upon comparison to traffic volumes for the proposed Peace Bridge Plaza.

The new plaza has been designed to accommodate forecasted traffic volumes and enhanced security at the border. The traffic forecast plays a part in the plaza configuration and size, but is only one part of what determines the plaza size.

*There were multiple reviews of plaza layouts by CBP, MDOT, GSA and other plaza users, following the release of the DEIS. The plaza size had been reduced from earlier versions and is now considered to be at a minimum size necessary, not to accommodate traffic flows, but rather to accommodate the security needs of CBP while enabling more efficient and safe traffic flows. This will result in overall reduced congestion and user wait times on the plaza. Additional information related to the plaza size is included in **Chapter 1.2** and **2.3** in this FEIS.*

3.) Several commenters believed that “the DEIS does not provide adequate justification to support the 65 acre physical layout/size of the Preferred Alternative.” They were also concerned that “the plaza may not be laid out in the most efficient possible manner.”

*There were multiple reviews of plaza layouts by CBP, MDOT, GSA, and other plaza users following the release of the DEIS. The plaza size has been reduced from 65 acres to 56 acres and is now considered to be at a minimum size necessary. A detailed discussion of these plaza changes can be found in **Chapter 1.5** and **Chapter 2.2** in this FEIS. The layout of the plaza has been determined with significant input from CBP and GSA and represents the best possible layout for the purpose of complying with the National Environmental Policy Act and is not intended to be the final design layout for the plaza.*

There are many not so obvious requirements that affect the layout of the plaza and its corresponding size. These are discussed in the two comments above.

The proposed size of the plaza has been through numerous reviews by CBP, GSA, FHWA, and MDOT and represents a size that has been meets the requirements of CBP for completing their mission at the border while minimizing impacts to the local community.

7.2.17 Land Use Issues

1.) Several commenters questioned if the proposed plan was consistent with local land-use and zoning plans and asked for coordination with local agencies. Some felt inconsistencies with local plans warranted efforts to reduce the new plaza “footprint to approximately 40 acres like the proposed new Peace Bridge Plaza.”

*As noted in **Section 3.1.3** of the **DEIS**, none of the proposed alternatives, including the Recommended Alternative are accounted for within existing land use plans or ordinances. The city will need to re-*

*evaluate the appropriate zoning and its plans for future land use based on the changes brought about by the enlarged plaza and roadway improvements. As outlined in **Appendix C** of this FEIS, MDOT has committed to fund any necessary update to the Master Plan and zoning ordinance resulting from the plaza expansion.*

As discussed for the previous question CBP has reexamined the plaza needs and determined the proposed plaza size could be reduced from 65 acres to 56 acres.

2.) One commenter inquired if there were any public lands within the project's footprint and how any impacts to the public lands would be mitigated.

*There are three publically-owned pieces of land within the Study Area as described in detail in **Chapter 4** of the **DEIS** and illustrated in Figure E.21 of the appendices. Of these, the only property of these directly affected by the project is Port Huron Township Park No. 1, which would be affected by reconstruction of the I-94/I-69 mainline and the new Black River Bridge. As noted in **Chapter 4** of the **DEIS**, this would be a de minimis impact (meaning that this minor impact would have no adverse effect on the function of that park resource). A narrow strip of park property (approximately 0.3 acres) bordering on the north side of the Water Street interstate off-ramp would be needed for new highway right-of-way. Temporary right-of-way needed would be approximately 0.1 acre at the entrance to the park for driveway grading and connecting to the new Water Street roadway. A potential 1.2 acres may be needed for a stormwater detention easement near the Black River.*

*The Charter Township of Port Huron's letter in **Appendix D** of the **DEIS** dated April 10, 2007 has concurred with MDOT that the impacts would be very minor and not create a temporary or permanent adverse change to the park. The township's Parks and Recreation commission has indicated that they would be interested in mitigation that would include returning excess property to the park and landscaping the potential drainage easement so that it is an aesthetically pleasing natural area.*

3.) A group of commenters asked that following construction, "excess land" be given to the city for redevelopment.

Excess land (if any) will be inventoried and sold at fair market value after construction has been completed, per normal MDOT policy. MDOT is legally required to sell excess land at fair market value.

4.) Three commenters were concerned with the incorporation of the development into existing community plans, ordinances and zoning and the expected expense for each community.

A similar comment question was previously asked; please see the response in Section 7.2.17, comment 1.

7.2.18 Mitigation Efforts

1.) Several commenters believe an “unprecedented mitigation effort” is necessary to address the social and economic impacts that will be caused by the Preferred Alternative. They believe MDOT should consider “creative and unique” mitigation efforts including those that make use of non-traditional funding sources. NEPA regulations regarding mitigation were referenced, including 40 CFR 8 1500.1(b), 40 CFR 1500.2(f); 40 CFR 1508.20 and 23 CFR 771.105(d).

*In response to community concerns received from the release of the DEIS, the Study Team initiated a Project Enhancement and Mitigation (PEM) group comprised of representatives from the city of Port Huron, St. Clair County, Port Huron Township, federal and state elected officials, GSA, FHWA, and MDOT. This group met monthly from February thru November 2008 to work through issues raised by the local community regarding the proposed plaza and corridor improvements. A summary of the group activities and outcomes can be found in **Appendix C** of this FEIS. MDOT and FHWA are very cognizant of the NEPA guidelines and implementing regulations and follow them closely along with other applicable state and federal laws including Act 51.*

The project is not truly unprecedented in magnitude within Michigan as was commented. There have in fact been numerous urban highway projects and airport expansions that have resulted in a higher number of community impacts and relocations. However, as the comment accurately points out, the plaza project will benefit millions of citizens while its negative impacts will mostly result within the city of Port Huron and St. Clair County. The project will also improve access to downtown Port Huron and only slightly modify access to commercial centers north of Port Huron.

*The Study Team appreciates the city of Port Huron’s and other stakeholder’s interest in creative mitigation and the research they have done. The Study Team acknowledges that there are strong opportunities to be creative in mitigation efforts for the project. For additional information, see PEM in **Appendix C** and the Green Sheet in **Chapter 5**.*

2.) One commenter concluded that the Mitigation chapter of the DEIS was too general and “did not offer specific mitigation actions for specific impacts.”

*Project specific mitigation has been developed as a part of this FEIS process for the Recommended Alternative. Additional mitigation details are included within this FEIS mitigation “green sheet,” found in **Section 5.0** of this FEIS. Many of the design specifics such as aesthetic treatments detailed lighting standards, etc. are dependent on the engineering and architectural detail of the facilities design. These will be detailed with further public input in the subsequent design phase.*

MDOT will fund the development of an Aesthetic Design Guide which will describe and illustrate design intent, specific aesthetic design features and enough design detail to demonstrate the aesthetic commitments to be carried forward during the final design and construction phases of the project. MDOT and GSA commit to work with the local Context Sensitive Solutions (CSS) community advisory

committee to develop a plaza design which reflects the regions heritage and identity. This process will be carried forward into the design and construction phases of the project.

Mitigation and enhancement activities contained within the Final EIS and Record of Decision is a binding commitment that MDOT must follow during the implementation phases of this project.

7.2.19 Noise

1.) One commenter asked how construction noise would be minimized during construction.

Section 5.6 of the DEIS documents MDOT's best practices for minimizing noise impacts during construction. Construction activities will be limited to dawn to dusk, unless the city/township requests changes to this policy to allow construction to proceed more quickly.

2.) Three commenters were concerned about the additional noise of idling and accelerating trucks at the expanded plaza and whether this was incorporated into the noise analysis.

Trucks are not permitted to idle on the plaza when not in line at the primary inspection booths. Once in the secondary plaza area, trucks are required to turn their engines off due to security concerns. Backups on the plaza are anticipated to be reduced substantially with the new plaza, and as a result, the idle of trucks waiting to enter the primary booths will be reduced. The speed limit on the plaza and the bridge over the St. Clair River is quite low and acceleration is kept to a minimum due to the slower speeds.

3.) Two Commenters believed that Riverside and Hancock Street and 10th Avenue should be included as noise receptors in the noise analysis.

These residences were included in the noise analysis and were represented by Receivers 151, 63, 67, 129, 155, 156, 157, 158 96, 97 106, 107, 172 and 174 as shown on Figures E.24 and E.25, pages E-33 through E-36 in Appendix E of the DEIS.

4.) Two commenters questioned the prediction of lower noise levels at noise receptor locations 73, 75, 106, 107, 172 and 174 which will experience greater traffic volumes.

The Recommended Alternative will increase noise levels at all six of these noise receptor locations 1 to 5 dBA as shown in Appendix E, Pages E-35 and E-36 of the DEIS.

5.) What are the future predicted noise levels at noise receptor location 152 and will this land use be compatible with future noise levels?

Whether the future land is acquired by MDOT as part of the project or not, future noise levels at this location will be very similar to the projected levels for Receivers 150 and 151 as shown on Figures E.24

and E.25, Pages E-33 through E-36 in Appendix E of the DEIS. A portion of the land would be exposed to noise levels above the NAC and other areas would be below the NAC.

6.) One commenter was concerned whether baseline measures for noise have been established in the Study Area and if these measures fall within the acceptable ranges of the City and Township ordinances.

Baseline existing noise levels throughout the corridor are presented in Pages E-34 through E-36 of the DEIS, Appendix E.

7.) One commenter was concerned with local land uses and how MDOT will involve those entities affected by noise issues in context solutions development.

In the Recommended Alternative commercial and residential properties that abut the plaza will in most cases experience an increase of a few decibels. Any future public meetings will be advertised to the public locally and posted on MDOT's website; local government officials are also asked to participate on behalf of all residents.

8.) One commenter questioned "what steps will be taken during construction to minimize the impacts of noise on surrounding land uses, residents, and businesses?"

Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors if at all possible.

Construction activities will be limited to dawn to dusk and all noise ordinances will be followed unless the City/Township requests changes to this policy to allow construction to proceed more quickly. MDOT will work with the city of Port Huron and with Port Huron Township if a permit is required to work outside of construction hours. In areas where construction vibration is anticipated, basement surveys will be conducted before construction begins to document any damage caused by highway construction. Identification of properties to be offered basement surveys will be determined during the design phase.

9.) General commenters inquired as to site specific noise impacts. One asked if post construction noise would be monitored and action taken if exceeding standards?

MDOT does not recommend the installation of noise barriers for the Recommended Alternative. Although the DEIS stated a noise wall would be constructed, after further analysis, the noise wall does not meet warrants based on state noise policy. If final design results in substantial changes in roadway design from modeled conditions, noise abatement measures will be reviewed. During the design phase the feasibility and reasonableness of the noise barriers are reviewed in greater detail. Section 3.4 of this FEIS discusses the updated noise analysis and results.

10.) One commenter inquired, "When practical, where and how will berms and natural sound barriers (trees) be applied to mitigate noise pollution?"

Berms and trees will not be utilized around the plaza as there is not enough ROW to create effective sound barriers. Trees adjacent to plaza security walls/fences are not permitted. Berms are being proposed around the welcome center to help buffer the adjacent properties. Trees as inquired about by the commenter provide no noticeable reduction in noise levels; however, landscaping will be considered as a part of the context solutions for design.

7.2.20 Other Environmental Concerns

1.) Two commenters were concerned with the potential hazards caused by increased impervious surfaces on wildlife habitat.

Most of the Study Area is highly urbanized and developed. Most of the habitat that would be affected by an increase in impervious (paved) surfaces consists of yards of homes and the edges of fields. The proposed Welcome center site occupies a former farm field already designated for residential development. The proposed project affects habitat areas that have low native plant diversity.

*No designated or unique habitat areas would be affected by the project. The project would involve a loss of 4.36 acres of wetland habitat as discussed in **Chapter 3.12** of this FEIS. The project will also affect stream related habitat at the crossings of the Black River and Stock's Creek as discussed in **Chapter 3.10** of this FEIS. Impacts to wetland and stream habitats will be minimized through the design phase and mitigated by construction of replacement wetlands and use of best management practices to address stream impacts. **Chapter 5** of this FEIS summarizes the mitigation measures proposed for the project. No significant impacts to wildlife habitat are expected from the project.*

2.) Three commenters inquired if Leadership in Energy and Environmental Design (LEED) standards will be incorporated into the construction of the proposed facilities.

A similar question was previously asked; please see the response in Section 7.1, comment 2.

3.) Has any part of the site been classified as an "environmentally sensitive" area?

No part of the Study Area has been classified as an environmentally sensitive area.

4.) One commenter asked what portions of the project were in a designated DEQ/NOAA/EPA Coastal Zone and asked what steps will be taken to mitigate the impact of pier work in the river or coastal zone impacts.

The Coastal Zone within the project area is associated with the St. Clair River and the Black River. The portion of the project located within the Coastal Zone is the area between Water Street and the east side of the Black River. The Coastal Zone adjacent to the St. Clair River extends to 10th Avenue and thus is not

within the project limits. As stated in the DEIS, the replacement of the Black River Bridge will occur within the limits of the Coastal Zone. The Michigan Department of Environmental Quality (MDEQ) indicated that the project is consistent with the Michigan Coastal Management Program.

5.) One commenter inquired how invasive plants species will be deterred and if native plants will be incorporated into the landscaping of the project.

Monitoring for invasive plants is performed at the same time the mitigation area is monitored for success. During each site visit sampling quadrants are used to determine the percent cover of each species within the quadrant. Sampling quadrants are placed randomly and intended to give a fair and random representation of the mitigation site. If the percent cover of invasive plants exceed permitted percent cover values then they are required to be treated or the mitigation area is not considered to be meeting requirements. As part of the wetland mitigation permit process, MDOT will be required to monitor the new wetland site for up to five years to ensure success.

6.) A few commenters expressed concerns regarding the DEIS recommendation for further study of the Recognized Environmental Conditions. They concluded that the DEIS should “be conclusive in its findings.” There were also questions as to whether buried heating oil tanks may remain in the area and how they would be handled if identified.

MDOT performs more detailed environmental analysis as deemed appropriated during the real estate appraisal or acquisition processes. The intent of the Phase I Environmental Site Assessment (ESA) performed as a part of the NEPA process is only to identify potential environmental conditions that may be of significance to warrant a more detailed analysis prior to alternative selection. A detailed study is only required during the NEPA process if the preliminary Phase I ESA identifies potentially contaminated sites that are of enough concern that they could have clean-up costs that would change the selection of an alternative. The Study Team identified no such serious sites of concern for this project. MDOT will follow all applicable state and federal laws for the remediation of contaminated materials/soils.

7.) One commenter inquired “In what ways would each alternative under consideration encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?”

*The comment refers to the potential indirect environmental impacts of the project. Indirect impacts of the project are discussed in **Section 3.7** of the **DEIS** and **Section 3.2** of this **FEIS**.*

8.) A few commenters expressed concern that security lighting and general lighting from the expanded plaza will “spillover into surrounding properties.” How will this “light pollution” be minimized?

MDOT, CBP and GSA will develop detailed lighting plans for the plaza and corridor lighting elements during the design phase. All efforts will be taken to minimize light pollution on adjacent neighborhoods

and businesses. For the Recommended Alternative, the plaza lighting will utilize directional or cut-off luminaries on the plaza perimeter designed to minimize light spillage beyond the security wall surrounding the plaza.

7.2.21 Pedestrian and Non-Motorized Access

1.) Two commenters were concerned about the impact to “minority and low-income residents in the Study Area who rely on walking to school, work, or for recreation.”

As discussed in greater detail in Section 3.3.4 of the DEIS, the blocks containing residences affected by the Recommended Alternative and the City East Alternative generally have lower percentages of minority or low-income population than the city as a whole. Nonetheless, under the Recommended Alternative, there may be individual impacts to persons that rely on walking to school, work, or for recreation.

One of the benefits of the Recommended Alternative (City West) compared to the City East Alternative for such persons is that the local street system would have two north-south roadways for pedestrian and motorized circulation (Pine Grove Avenue and 10th Avenue) as opposed to just one. However, Pine Grove Avenue would be realigned, which could result in longer walk distances for certain trips. One of the objectives of the design of the reconfigured roadways will be to provide landscaping and amenities that provide a safer and more pedestrian-friendly environment.

Based on comments received on the DEIS, a non-motorized path will be added to the south side of the Black River Bridge to provide pedestrian access across the Black River. This pathway will connect to the new sidewalks along relocated Pine Grove Avenue and to new sidewalks along Water Street.

An Environmental Justice analysis was performed using a set of guidelines provided by the Federal Highway Administration (FHWA) and in consultation with MDOT officials responsible for Environmental Justice issues. Potential Environmental Justice effects are defined as the unavoidable negative effects of the project that would be mostly experienced by minority and low-income populations or are higher than the negative effects that would be suffered by non-minority and/or non-low-income populations. The analysis has determined that there are no disproportionately high and adverse human health or environmental impacts on minorities and/or low-income populations by the No-Build or the Recommended Alternative. For further explanation, see Section 3.6 of this FEIS .

2.) A couple of commenters expressed concerns regarding the need for accessibility for pedestrians and bicyclists within the project area and whether bicycle access would be accounted for at the potential roundabout on Pine Grove Avenue. Commenters also believed it is necessary to have a non-motorized route over the Black River.

In conjunction with the city of Port Huron’s plans for providing non-motorized routes, this project adds shared use of 10 foot sidewalks along the realigned Pine Grove Avenue.

A non-motorized path is proposed crossing over the Black River Bridge and has been added to the south side of the proposed structure.

The roundabout shown for Pine Grove Avenue as part of the DEIS has been removed. Pine Grove Avenue in this location will be built as a boulevard section with a wide median to provide traffic with a left turn to access the new plaza entrance ramp.

3.) One commenter inquired what design issues would be considered for the visually impaired pedestrian at the proposed Pine Grove Avenue roundabout.

As discussed for the comment above, the roundabout shown for Pine Grove Avenue as part of the DEIS has been removed.

4.) One commenter expressed concern regarding maintaining “pedestrian and other non-motorized access through the construction site during the construction period,” asking how routes would be determined and designated.

All reconstructed and new city streets will have full pedestrian amenities provided. MDOT will consider pedestrian access throughout the Study Area during the construction process and arrangements will be made to ensure safe pedestrian travel.

5.) Two commenters believed it is necessary to have a non-motorized route over the Black River.

A non-motorized path is proposed crossing over the Black River Bridge and has been added to the south side of the proposed structure.

7.2.22 Project Design

1.) One commenter asked “when and how will MDOT discuss the current design capacity?”

*The existing and proposed plaza capacity is discussed in **Chapter 1.6** of this FEIS, discussing the delay at the primary inspection booths.*

*Roadway design criteria are addressed in **Section 2.2 and 3.4** of the **DEIS**. The Study Team identified key engineering and facilities design criteria based on reasonable engineering standards and information on facilities and security provided by CBP and GSA All plaza design elements adhere to CBP’s Port of Entry Design Guide. Design criteria contain fundamental roadway and bridge design elements adhering to MDOT design guidelines.*

2.) One commenter was concerned with the plaza and roadway design and enhancing local access to the area from the plaza and I-94/I-69.

The Recommended Alternative will enhance traffic flow in an efficient and safe manor. In the eastbound direction to Canada local movements will be separated from Canada bound freeway traffic at the Water Street interchange providing 6-lanes eastbound compared to the existing 2-lanes. In addition there will be 8-toll booths compared to the existing 5-toll booths. In the westbound direction into the U.S there will be 20 Primary Inspection Lanes compared to the existing 13 PILS. The Relocated Pine Grove Avenue will provide direct access to and from the plaza for all movements. This access at Pine Grove Avenue, along with a more efficient border crossing, will improve the ability of travelers to visit the local area.

7.2.23 Project Funding

1.) A few commenters wanted assurances that the city of Port Huron will not be required to pay any portion of the costs of the project.

*Due to state law, this is not a commitment that MDOT can make in the DEIS or FEIS. MDOT commits to working with the city of Port Huron regarding any Act 51 cost responsibilities they would have for the project. The State Trunkline System is one of the jurisdictional road systems authorized by Act 51. Designated by the State Transportation Commission, the State Trunkline System consists of roads, streets, and highways found both inside and outside the limits of incorporated cities and villages. It assigns to the Michigan Department of Transportation the direction, supervision, control, and cost of maintenance, construction, and improvements to State Trunkline highways. Incorporated cities of over 25,000 people are required to make a financial contribution, according to population, for improvements to State Trunkline highways within their jurisdiction, and for connections between city streets and the State Trunkline system. Under Act 51, the city of Port Huron would be required to provide 8.75% of the state required match for any trunkline improvements. See **Section 5.29** in this FEIS for more information.*

2.) One commenter asked what was the source of the \$150 million of “private” funding for the project designated in the Regional Transportation Plan, and expressed concern that there was no budget for maintenance of traffic costs.

Funding for the project will come from a mix of funding sources including federal aid earmarks, and bonding against future plaza related revenue sources. Revenue sources from plaza operations include future toll revenue and lease payments made by the General Services Administration and the Duty Free operations. Revenue from plaza operations has been coded as private. In this case that means that not all the funding is coming from state and federal transportation sources.

The cost estimates include approximately \$11 million for maintenance of traffic activities during construction.

7.2.24 Public Involvement and Coordination

1.) Two commenters believed the public was not involved or adequately represented in the early stages of the alternatives development process. They were concerned that members of the public were not part of the Advisory Committee.

The early alternative development process (Illustrative Alternatives) consisted of two phases. In the first phase, a wide variety of concepts and ideas for the plaza improvements were explored. Some of these concepts were fully developed into alternative plans. Others were discarded once it became apparent they would not meet the purpose and need for the project. There were three public meetings during the early alternative development phase of the project and a total of 6 public meetings and three public workshops held prior to the release of the DEIS. See Chapter 6 of this FEIS for additional details on public coordination.

The Advisory Committee provided expertise and input regarding pertinent issues related to the Blue Water Bridge Plaza Study. The Advisory Committee consisted of a core group of stakeholders representing plaza inspection agencies, local and state officials, Canadian officials, private firms, local agencies and key representatives from the local community. The general public was represented through their elected local officials and various local agencies who participated in the advisory committee. MDOT ensured that the concerns of residents were represented in the Advisory Committee by inviting local official and local agencies to be active members of the Advisory Committee. The general public had opportunities to become involved through public meetings and public hearings. For a summary of public involvement opportunities, see Chapter 6, of this FEIS.

2.) Two commenters inquired whether there would be a central office or person assigned to the receiving of and responding to concerns filed by residents and visitors during construction, when they would be available, and whether there would be someone available to appeal a decision made on a complaint.

Mitigation and enhancement activities contained within this FEIS and Record of Decision is a binding commitment MDOT must follow during the implementation phases of this project. The local office responsible for construction oversight, schedule questions, and project complaints will likely be the Port Huron Transportation Service Center. A final decision on who the primary contacts will consist of will be made after the design phase. The Port Huron Transportation Service Center is open 5 days a week during regular business hours.

3.) One commenter stated, “We need our federal and state legislators to publicly voice their opinions on these projects, including draft, design, and submit public comments.”

Federal and State legislators have been coordinated with during this project and provided a copy of the DEIS. Federal and state legislators were encouraged to comment on the DEIS.

7.2.25 Public Transportation

1.) Several commenters voiced concern about the need for continued access to public transportation, the maintenance of routes with minimal service disruption, and access for low-income users of transit to like facilities of those relocated. There was also a question of

financial and programmatic assistance to ensure transit access upon completion of the project.

*MDOT commits to early coordination with transit providers during the design process and into the construction process to ensure continuous service. As noted in **Section 3.12.14** of the **DEIS**, there may be minor alterations to existing public transit services, especially during the construction process. After construction is completed, local road improvements on Pine Grove Avenue may improve transit operations as the roadway is expected to experience less congestion. At the same time, transit routes and stops may change slightly as the roadway is realigned; this may result in shorter or longer walk distances for some transit patrons. If there are gaps in the transit agency's ability to serve alternative destinations, there may need to be reconsideration of transit service routing. Current routes for buses, dial-a-ride vans, shuttles and trolley services may need minor modifications. MDOT will continue to coordinate with the Blue Water Area Transit during the design and construction phases to ensure that transit services in the Study Area continue to adequately serve the public, particularly those persons who are transit-dependent.*

7.2.26 Right of Way Acquisition and Relocations

1.) One commenter was concerned with lack of information regarding the impacts of “probable business relocations” within current residential lands. The commenter believed that these land use implications should have been addressed in Section 3.1, Land Use and Zoning.

*The analyses of relocations was not repeated in the **DEIS Section 3.1, Land Use and Zoning**, in the interest of keeping the EIS document from becoming larger (and less reader-friendly) than it currently is. This discussion was included in **Section 3.2.9, How will the Alternatives Affect neighborhood?** in the **DEIS**. The format of the document was approved by FHWA and is consistent with other EIS documentation produced throughout the United States.*

2.) Numerous commenters requested more specific information in regard to business relocation economic impacts. Specifically, where businesses would relocate, if the customer base and market exposure would be the same, and how the existing market would be affected. One commenter felt businesses needed to be assessed more specifically to their differing relocation needs.

MDOT is available to assist businesses and residents find appropriate housing or commercial sites as close to their original location as is possible, but if residents or businesses wish to move, MDOT cannot compel them to remain in the same area. MDOT follows state and federal guidelines, which allow owner flexibility in the relocation process. MDOT makes the good faith offer, based on fair market value to both owners and tenants, who are then free to choose their replacement location,. Relocation advisory services are extended to both parties.

Under the City West Alternative, the relocated Pine Grove Avenue provides new frontage access to existing vacant or underutilized business locations north and south of the plaza. This may be an

attractive location for new or relocated businesses, providing economic redevelopment opportunities around the plaza.

The businesses relocated may choose to move to a different community or remain close to their current location if possible. Some changes in existing business patterns for residents and business owners in the vicinity of the plaza are inevitable with the business relocations. Some of the potential relocations are due to the need to acquire parts of the land of a business but not the whole property. In these cases MDOT may be able to work out an agreement so that the business can remain in its existing location if the property owner is interested. Relocated and new businesses will likely develop on available sites in the vicinity of the new plaza in order to serve the local market and cross-border traffic served by existing businesses.

The City West Alternative was designed to provide optimal access to businesses north of Hancock Street and maintain the most efficient flow of traffic. North of plaza, relocated Pine Grove Avenue was redesigned as a one-way pair with northbound Pine Grove Avenue traffic shifted east and connected to existing Pine Grove Avenue near Riverview Street. This provides easy access to the businesses north of Hancock Street for all M-25 connector and Pine Grove Avenue traffic. Presently only Pine Grove Avenue traffic has direct access to the businesses north of Hancock with M-25 connector traffic bypassing to the west and tying into Pine Grove Avenue further north. The commercial blocks north of Hancock Street could potentially serve as future locations for businesses serving border crossing traffic displaced by the Recommended City West Alternative.

Relocations indicated in the DEIS and FEIS are due to direct property acquisition and not any kind of indirect changes in shopping patterns or other behavior. The EIS assesses relocations that will result in a site that will be used for a transportation use.

3.) A number of commenters were concerned about how many homes and businesses were being relocated, where to, and when the process would begin. There were also questions regarding what properties MDOT had already acquired.

Property Acquisition will begin following receipt of the Record of Decision. The timing of these relocations would be dependent upon the determination of right of way needs during final design.

MDOT has acquired some properties as hardship acquisitions in response to property owner requests for assistance. The Study Team included recent hardship right-of-way acquisitions in the evaluation of impacts including the number of relocations, job relocations, economic impacts and tax base impacts. In the cases where MDOT made hardship or protective acquisitions a number of years ago, prior to the development of alternatives for the Blue Water Bridge Plaza Study in 2002, such as the vacant London's Dairy Property, impacts were not included.

4.) One commenter was concerned with how public and private utilities within the right-of-way (ROW) will be relocated.

The city of Port Huron will have dedicated access to their municipal utilities. A utility corridor will be created around the plaza within MDOT owned ROW. Detailed utility relocation plans will be developed during the design phase.

The specifics of utility relocations are a final-design issue that will be considered in more detail, after the NEPA process has been completed. MDOT recognizes the need for unfettered utility access and will coordinate with them and all the utility providers, during final design to ensure continuous access is maintained during and after construction.

5.) There were a few comments regarding the effects of relocations on neighborhoods.

See Section 3.6 of the DEIS, and Section 3.7 of this FEIS for more information on relocations.

7.2.27 Security

1.) A few commenters stated that the “DEIS does not provide anywhere near adequate detail/analysis regarding existing and future vehicle delays/queues at the plaza.” They cite in comparison the more extensive analysis provided in the Peace Bridge DEIS.

*The primary need for a new plaza at the Blue Water Bridge has been inspection and security enhancements and safety concerns with the existing plaza. Although delay data was not included within the DEIS, each plaza alternative was developed to accommodate traffic volumes within CBP’s and MDOT’s acceptable level of delay. To meet the concerns of stakeholders including the local community, basic information on vehicle delays is now included in **Chapter 2** of this FEIS for the Existing, No-Build and City West plaza configurations.*

2.) Numerous commenters expressed concern regarding the number of inspection booths and the level of CBP staffing at the booths. Request was made for more detail on delay associated with CBP staffing levels and what would be done to address this. It was questioned if the alternatives could vary with improved staffing.

The primary need for a new plaza at the Blue Water Bridge is inspection and security enhancements and safety concerns with the existing plaza.

CBP management of the ports of entry determines the level of staffing based on location specific criteria. CBP maintains adequate staffing to fully staff all 13 existing primary lane booths during peak traffic hours. With an increase in the number of primary booths, CBP will reassess the staffing allocation at the future plaza port to ensure that all booths will be fully staffed during peak hours.

For national security and law enforcement reasons, CBP does not publicly disclose the number of CBP officers located at U.S. ports of entry (POEs).

3.) Several commenters questioned why “reverse inspection” was eliminated as an alternative suggesting that this option should be further analyzed.

The Study Team considered the possibility of moving some or all plaza inspection facilities to the Canadian side of the bridge. The major barrier to moving United States facilities to the Canadian side of the crossing is sovereignty related issues over jurisdiction, which can only be worked out through international diplomatic channels and are beyond the scope of this study. This alternative was dropped from further consideration

Reverse inspection also will not solve the issue of an undersized plaza on the U.S. side as the Canadian plaza currently occupies 98 acres.

7.2.28 Signals and Signing

1.) Two commenters were concerned with how residents and visitors would be kept informed of construction activities, delays, detours and other disruptions during construction, asking for details on signage, resources and outreach when signage would be installed.

MDOT will attempt to minimize disruption of traffic in the construction area to the greatest extent possible. Although control of all construction related inconveniences is not possible, motorists and pedestrian safety will be ensured by signing all construction areas.

Detailed detour plans will be developed prior to the beginning of construction with local officials. Informing the public of current and upcoming construction/traffic related concerns will be an important part of the construction process. A motorist information plan will be developed to provide information on open routes, detours, locations of construction, and best routes to access key facilities to visitors, motorists, residents and business owners through the use of signs, a project website and a toll-free project hotline.

7.2.29 Support and Economic Assistance to Community

1.) Several commenters believed that MDOT needs to make a firm, long-term commitment of staff and budget to provide economic development assistance to the local communities affected by the project including helping to identify and secure state and federal grants. They requested assurances that MDOT will meet and work with affected communities. Participation of FHWA and CBP was also requested. It was asked that MDOT consider utilizing an economic development consultant to work with MDOT and the city of Port Huron.

MDOT commits to developing an economic development strategic plan. MDOT also commits to fund up to \$1 million for economic development services to fund the implementation of the aforementioned plan. An agreement will be developed with an appropriate local agency that will be responsible for using these funds to implement key strategies that are developed as part of the economic development plan. The estimated cost of this project enhancement is \$1,000,000.

An economic development strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. The economy of Port Huron and St. Clair County is changing; globalization and new technologies continue to accelerate the rate of that change. With an economic development strategic plan in place, St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

This economic development strategy will consider the economic conditions of the region, capture the essential elements of any earlier economic development plans for the community, and identify strategies and specific actions of importance to the region's economy. The goals are to improve the economic prosperity of the region and define a plan that builds on the region's strengths that make this area an exceptional place to live and work. The plan will also identify areas of concern that should be considered while moving forward as well as goals and actions the community should collectively pursue.

*MDOT will continue to coordinate with the local community and bring other state and federal agencies and resources to the community. See **Section 5.2** of this FEIS for more information on the economic development strategic plan.*

2.) One commenter asked if funding could be provided to the local tourism bureau for marketing incentives for businesses supported by border crossings,

*MDOT has committed to coordinate with the Greater Port Huron Chamber of Commerce, to fund a portion of the construction costs for a local visitor center addition as part of relocated chamber offices along Pine Grove Avenue. It is envisioned this facility would provide local information and support cross-border marketing opportunities. See **Chapter 5** of this FEIS for additional mitigation information.*

3.) One commenter asked if a permanent source of funding will be provided to local communities that will be hosting and providing services or losing tax revenues.

MDOT currently pays the city of Port Huron for both utilities and emergency service provision for the plaza and anticipates paying a greater amount of \$300,000 as part of the new, expanded plaza. A permanent source of funding is being proposed for emergency services on the plaza provided by the city of Port Huron and Port Huron Township.

Revenues from tolls collected at the Blue Water Bridge are restricted to transportation and maintenance purposes only per MDOT's toll authority agreement. Some Blue Water Bridge funding will be used initially to implement eligible mitigation/enhancement measures and strategies. However, a permanent source of funding will not come from toll revenue.

7.2.30 Threatened and Endangered Species

1.) Several commenters expressed concern regarding threatened and endangered species in the Study Area, how they were identified as well as how they will be impacted and protected.

*The Study Team identified plants, wildlife and threatened and endangered species with the potential to be found in the Study Area through record searches and field investigations. Information was obtained from the following sources to provide initial direction and focus for field assessments: The United States Department of Agriculture Soil Survey for St. Clair County, St. Clair County Plat Book, St. Clair County Element List courtesy of the Michigan Department of Natural Resources, and United States Fish and Wildlife Service federal list of threatened and endangered species and National Wetland Inventory maps. A request was made to the Michigan Department of Natural Resources and Michigan Natural Features Inventory for records and information on state threatened or endangered species, and species of concern previously identified within the Study Area or surrounding areas (see **Agency Early Coordination Letters in Appendix D.1**).*

These resources assisted qualified biologists in providing additional focus to specific habitats during the field reviews of the Study Area. Specific target species and target habitat were identified based on information received from the Michigan Department of Natural Resources and the Michigan Natural Features Inventory.

*No threatened and endangered species of plants or wildlife were found in the Study Area. Spotted Turtle (State endangered species) habitat was found near Stocks Creek. Special care will be given to this area. **Section 5.12-5.14** of the **DEIS** describes what measures will be taken to protect existing vegetation, maintaining wildlife, and mitigation of threatened and endangered species.*

2.) Two commenters inquired how will migratory birds will be impacted and protected within the Study Area.

On projects that involve work on structures over watercourses, MDOT reviews potential impacts to migratory birds that may make (or have made) nests underneath the bridges. During the design phase of the project, the Black River Bridge will be reviewed for past migratory bird nesting activity. If evidence of migratory bird nesting is discovered, coordination between MDOT (Environmental Section and Region Resource Specialist), MDEQ, and U.S. Fish and Wildlife Service will occur. A "Special Provision" that describes procedures for dealing with migratory birds will be included within the project specifications. MDEQ permits required to conduct work on bridges over watercourses.

7.2.31 Traffic

1.) A few commenters were concerned with the possible loss of north/south travel capacity during construction. The commenters expressed concern that during construction the local street network will experience an increase in traffic resulting in long delays and

gridlock. They believe this congestion will have a negative impact on local businesses and be inconvenient for the traveling public. There was also concern that the local street network had not been adequately analyzed for construction and maintenance of traffic, associated emergency response access, or potential use of way finding signs. Commenters also believe the DEIS did not provide nearly enough detail regarding the proposed traffic control/maintenance of traffic plan and its costs.

The selection of the City West Alternative provides the ability to maintain critical north/south travel route during construction. Traffic and pedestrian access along 10th Avenue and Pine Grove Avenue will be maintained during construction to the greatest degree possible. As part of MDOT's maintenance of traffic planning efforts all efforts will be taken to minimize traffic delays, to the greatest extent possible. Final plans for maintaining traffic flow during construction will be prepared by MDOT prior to the beginning of construction in close coordination with the city of Port Huron, St. Clair County Road Commission and CBP. The cost estimates include approximately \$11 million for maintenance of traffic during construction. MDOT will also coordinate with the city of Port Huron emergency service providers and transit providers, prior to construction to ensure that they are aware of construction staging and that there is no limitation in their ability to respond to emergencies or provide critical community service. See Section 3.17, in this FEIS, for additional construction impact information.

2.) One commenter inquired as to “what steps will be taken to ensure constant access to neighborhoods and business areas” during construction, asking for a description of any anticipated disruptions and construction timeline and calendar.

As part of MDOT's maintenance of traffic planning all efforts will be taken to minimize access disruptions to local businesses, to the greatest extent possible. MDOT will make every effort to reach an agreement with the City and County Road Commission engineering staffs on planning goals and implementation strategies for project construction staging prior to the beginning of construction. At the onset of the construction phase, a detailed construction schedule will be developed. Impacted businesses and residential neighborhoods will be coordinated with at that time. See Section 3.17, in this FEIS, for additional construction impact information.

3.) One commenter inquired “Are there streets and pedestrian systems within the footprint and surrounding area that may be considered or rendered isolated by the user during the construction and after the completion of the project?”

There are no streets or sidewalk that would be isolated by the project in the manner described. Any closure of access would be considered a total acquisition for the purposes of this project. All reconstructed and new city streets will have full pedestrian amenities provided. MDOT will consider pedestrian access throughout the Study Area during the construction process and arrangements will be made to ensure safe pedestrian travel.

4.) One commenter questioned conclusions in the DEIS stating congestion will increase under the Do Nothing scenario as well as the causes of projected congestion.

*The traffic analysis performed for the DEIS used established methodology approved by MDOT and FHWA. No-Build congestion at key intersections is discussed in **Chapter 2** of the DEIS and is based on future traffic volumes and existing roadway geometrics. It assumes no improvements will be made to the current roadway system. The analysis is also consistent with assumptions included in SEMCOG's Regional Travel Demand Model.*

*For the plaza, a delay analysis was conducted for inclusion in this FEIS and the results are summarized in **Section 2.3** of this FEIS. The average delay currently at the border ranges from 20-24 minutes. Under the No-Build scenario, the average delay goes up to 30-35 minutes. The average delay for the Recommended Alternative is 3-4 minutes.*

5.) One commenter questioned, "In the "Cost of Congestion Analysis" section on page 3.4-12, the DEIS simply refers to a 2003 study by Taylor, Robideaux, and Jackson. This section mentions this report, but gives no actual data or findings until much later in Section 3.4. What steps did MDOT take to ensure that the findings of this 2003 study are still relevant today?"

The "Cost of Congestion Analysis" referred to on page 3.4-12 was a methodology developed in 2003. The actual parameters entered into the analysis were based on current traffic projections and more recent estimates for costs of delays to motorists. The \$4.3 billion figure derived for the Blue Water Bridge Plaza Study is not a 2003 figure but is based on a methodology developed in 2003, which is still applicable today, due to similar delays and traffic volumes, continued uncertainty in the cross border delivery process, similar wages for drivers waiting in queues, and the ongoing reduction in the number of daily trips drivers can make across the border (due to congestion).

6.) One commenter asked what other alternatives MDOT examined to effectively manage existing congestion and mitigate projected congestion. Were organizational system or technology solutions considered and how were those alternatives determined to be insufficient?

Technology solutions were examined as means both to expedite vehicle processing and as a means to assist with traffic flow. Many of these are being incorporated on the existing plaza as short term improvements and will be used as a part of the solution for the new plaza as well. One such example is the expanded use of non-invasive inspection technologies to expedite truck cargo inspections. Other such initiatives include the use of primary inspection booths capable of accommodating both passenger and cargo vehicles to enable more adaptability to change traffic conditions. Variable message signing, operational improvements through building placement and improvements to traffic circulation both on and off the plaza will also improve traffic flows.

The inability of the existing plaza to accommodate improvements needed to increase traffic flow, such as elimination of the "weave," on the Blue Water Bridge or improved inspection facilities necessitates the need for a new facility. The City West Alternative has been reduced to the smallest size possible while

still improving circulation, providing needed facilities, and supporting more comprehensive inspection policies.

7.) Two commenters were concerned about easy access on and off the Blue Water Bridge. One commenter cited examples of staff actively directing traffic on the Canadian plaza and suggested having a staff person on the U.S. plaza to direct traffic.

Access on and off the new plaza will be improved over the existing plaza due to the new roadways and signing which will provide motorists with better operations and directions. During peak traffic times, MDOT staff does direct traffic on the plaza to assist motorists and trucks with maneuvering and traffic conflicts.

8.) We recommend that relief/alternate roads be in place prior to construction of the Bridge Plaza Corridor. All attempts should be made to minimize construction overlaps that would impede the smooth flow of traffic into surrounding communities of Fort Gratiot, Port Huron Township and the city of Port Huron.

*Disruption of traffic due to construction will be minimized to the greatest extent possible. Traffic on I-94/I-69 will be maintained using freeway crossovers and temporary pavement, part-width construction techniques, and the use of detour routes. Detours will involve temporarily closing down certain roadways for construction while providing an alternate route of transportation. MDOT has also coordinated efforts with the St. Clair County Road Commission to ensure the construction of the Wadhams Road bridge is completed prior to undertaking construction of the I-94/I-69 corridor and Blue Water Bridge Plaza. It is MDOT and the Road Commission's goal to not have more than one river crossing closed at any time. Drivers will then have the option to use the Wadhams Road to Keewahdin Road route to bypass construction entirely, although this route will not be signed as an official detour route. See **Section 3.17**, in **this FEIS**, for additional construction impact information.*

9.) Several commenters were concerned that the DEIS does not “provide a definitive, clear, and well-reasoned justification for selection of the traffic growth rate.” They were concerned that the growth rate may be overstated due to other factors such as lack of major infrastructure improvements and a potential second international crossing in Detroit which they believe could draw traffic away from the Port Huron area.

Growth trends were developed based on the historic trends as this is the only substantial data available. Other factors such as economic growth, employment rate, and exchange rate do have a factor in the volume of traffic crossing the border; however their impact and potential future change can't be precisely quantified. The existing border crossing experiences delay on a regular basis and has several deficiencies that render it incapable of accommodating new inspection facilities or further safety and efficiency improvements. These are addressed in the purpose and need of the Blue Water Bridge Plaza Study DEIS. These factors require a new plaza accommodating the needs of CBP for security and processing, and traffic growth. An important factor to note in the size of an inspection plaza is the amount of commercial

traffic. Historically there has been a consistent growth in truck traffic at the Blue Water Bridge plaza up to 2001 with a slower growth rate since. Historical standards would indicate that a similar rate of truck traffic growth can be anticipated in the future. Both high and low forecasts were prepared to account for variation in growth rate. Decreasing the traffic forecasts does not eliminate the need for substantially improving maneuvering room for large vehicles, expanding inspection facilities to account for new processes and security measures, realigning the plaza with trucks on the right, and improving traffic flow. These design factors account for the majority of the plaza footprint.

Any number of uncontrollable factors can result in both short and long term increases or decreases in traffic growth, particularly at a border plaza. Some of these include:

- National economies
- Foreign trade policies
- Currency valuations
- Evolving transportation technologies
- Improved efficiencies or breakdowns in alternative transportation modes or routes
- Changes in industrial facility location or output
- Changes in trade and security standards, fuel costs, changes in manufacturing policies such as utilization of “just in time” delivery vs. on site warehousing
- Population growth and migration
- Immigration and visa policies
- Periodic labor shortages occurring in the transportation industry.

Most of the cited variables have had some influence on traffic growth at the Blue Water Bridge at some points in the past, and they are reflected in historical traffic counts. Changes in any one of these factors alone is not likely to have a dramatic effect on the overall traffic growth at the Blue Water Bridge Plaza. However, as with all traffic forecasting, the cumulative effect of such unpredictable policies and developments can account for both short and long term variations from estimates of traffic growth. Unpredictable variables such as those listed will continue to affect traffic into the future, and as a result historical trends continue to be the most reliable standard by which to account for traffic growth at this location.

The Blue Water Bridge Traffic Report discusses factors that have had an impact on crossborder traffic historically and that have the potential to impact traffic volumes in the future. These points take into account that there is no one accurate way to exactly predict what will influence future traffic volumes and by how much. Even very sophisticated traffic models with firm inputs are by necessity based on some degree of speculation and can produce a range of results. The traffic forecast methodology is clarified in **Chapter 2** of this FEIS.

The overestimation falls within the acceptable percentage difference according to ‘The Model Validation and Reasonableness Checking Manual, 1997’. Despite overestimating traffic volumes, delay has continued to increase at the BWB plaza. Factors such as 9/11 increased the inspection performed by CBP.

As discussed in the report, population growth is an elemental factor in determining traffic growth; however it is not the only factor. The Study Team believes that population growth and border crossing traffic growth would only replicate each other in a scenario where the economy and trade grow only as much as the population does. Under such a scenario, it would be reasonable to assume that 20-year passenger vehicle traffic growth would equal approximately 19% which would be the weighted average of the regional population growths discussed in the Traffic Memorandum. This could be considered the absolute lowest likely forecast absent the occurrence of a major incident causing a long-term shut down of the border. The Study Team's passenger vehicle traffic forecasts are in-line with this assumption. However, economic growth routinely outpaces population growth by a factor of 2 to 3 times the basic population growth based on traffic trends. Trade growth between the United States and Canada has been even higher on average than GDP growth since 1990 and has averaged more than 4% per year between 2000 and 2005 neighboring states transporting goods across the Blue Water Bridge. For these reasons it is reasonable to assume, as historic trends suggest, that commercial vehicle forecasts will exceed population growth forecasts

10.) One commenter requested that the DEIS address the impacts to Garfield Elementary School which is located less than one mile from the 10th Ave. and Garfield St. intersection.

School officials, staff, parents and students would likely be concerned about the potential disruption of the project during construction due to noise and detours interrupting

Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors if at all possible.

Construction activities will follow noise ordinances. Detailed detour plans will be developed during the design phase of construction with local officials input. Informing the public of current and upcoming construction/traffic related concerns will be an important part of the construction process. A Motorist Information Plan will provide information on open routes, detours, locations of construction, and best routes to access key facilities, to visitors, motorists and area residents and business owners. Signs, a project website, and a toll-free project hotline will all be used to inform the public.

At the onset of the construction phase, a detailed construction schedule will be developed. Impacted businesses and residential neighborhoods will be coordinated with at that time. MDOT will work with the school and city to address potential construction impacts to the school throughout the project.

11.) We believe that the DEIS does not provide nearly enough detail regarding the proposed traffic control/maintenance of traffic plan, its costs, and the negative impacts which will result during construction.

More detail has been provided regarding the maintenance of traffic plan in Section 2.3.6 of this FEIS. Goals have been established as a result of the PEM meetings with the city, county and other local officials. MDOT and the City recognize the importance of minimizing the traffic impacts to the local community

*as a result of the project, to the greatest extent possible. MDOT will make every effort to reach agreement with the City and County Road Commission engineering staffs on final planning goals and implementation strategies for the project construction staging, prior to the beginning of construction. Construction impacts are discussed in **Section 3.17** of this FEIS.*

12.) Three commenters inquired as to what measures MDOT will take to “decrease the severity and occurrences of crashes along the corridor and on the Plaza.”

Improvements to local roads, I-94/I-69 and the plaza are designed to meet MDOT safety standards which are designed to minimize the frequency and severity of traffic accidents. The proposed new inspection plaza and improvements along I-94/I-69 will improve long-term safety in the corridor by addressing a number of issues including:

- Separating local traffic from traffic going to Canada along I-94/I-69 before the Black River Bridge. This will reduce the likelihood of conflicts between local and Canada bound traffic.*
- Including wider shoulders on the new Black River Bridge to allow for easier emergency management and places for stalled vehicles.*
- Fixing the mid-bridge weave on the Blue Water Bridge so that cars and trucks no longer have to cross over each other when exiting Canada for the United States. In the U.S., car inspection booths will now be on the left and truck inspection booths on the right.*
- Continuing to provide electronic message signs which monitor and provide warnings on traffic conditions and any backups.*

13.) Two commenters expressed concern regarding future level of service at several locations within the Plaza and Corridor.

The I-94/I-69 corridor and local roads have been designed to accommodate the projected 2030 traffic volumes using micro-simulation design software to ensure that the proposed improvements will provide adequate function through the design year. Congestion on local roads is expected to be similar to or lower than it is today. Congestion of I-94/I-69 should be lower than exists today.

14.) Three commenters inquired as to how MDOT will ensure suitable allowances (either funding or actual improvements) are made to local jurisdictions to ensure the transportation network including transit operates at an optimal level during construction.

*MDOT will coordinate with community stakeholders prior to beginning construction of this project to assure impacts on local services are minimized to the greatest extent possible. Specifically, MDOT will coordinate with the Blue Water Area Transportation Commission and the St. Clair County Transportation Study regarding concerns which affect their daily operations. See **Section 3.17**, in **this FEIS**, for additional construction impact information.*

*For more information regarding mitigation and enhancement commitments made to the local jurisdictions, see **Chapter 5 Mitigation and Project Enhancement** of this FEIS.*

15.) One commenter requested “actual numbers and projections that prove there will be a relief in traffic congestion for environmental justice populations.”

*The traffic analysis was summarized in **Chapter 2** of the **DEIS**. The traffic analysis indicates there will be a relief in traffic for all members of the population including Environmental Justice populations, the detailed traffic analysis can be found in the Blue Water Bridge Traffic Memorandum and is available upon request to MDOT.*

7.2.32 Michigan Welcome Center

1.) Many commenters were concerned with the proposed placement of the welcome center as it is only accessible by those travelling west. They suggested the welcome center be placed in the median to serve both east and west travelers and to allow greater access to Port Huron businesses, restaurants and points of interest.

Placing the welcome center in the median was evaluated extensively, however it was ruled out for the following reasons:

Limited Right-of-Way (ROW): The proposed expanded Michigan Welcome Center would require approximately 45 acres to fully construct. Only 6 acres is available within the median to construct a Michigan Welcome Center. With the limited median ROW, adequate space can not be provided for the necessary welcome center buildings, parking and other facilities.

Safety: A welcome center constructed in the median would require two left hand merge ramps along both directions of I-94/I-69. Left hand merges are contrary to driver expectations, as slow moving traffic is mixed with faster moving traffic traveling on the interstate. Based on where the Michigan Welcome Center would need to be located within the median (on a sweeping curve), the mix of vehicles (trucks vs. cars), spacing of adjacent interchanges (see below) and speed along the corridor, FHWA approval of left-hand merges at this location is unlikely.

Conflicts with adjacent interchanges: The location of the proposed new Michigan Welcome Center is very close to both the I-94/I-69 and Lapeer Connector interchanges. Placing left hand exit and entrance ramps in both directions along I-94/I-69 would create an undesirable traffic weave situation that is similar to the current Black River Bridge weaving issue. MDOT could not construct the full access Lapeer connector interchange and provide enough space between the interchange and median welcome center ramps. MDOT believes a full access Lapeer Connector interchange would provide greater benefit to the community than a welcome center in the median.

*As detailed in **Section 5.0** of this FEIS, MDOT commits to funding a local visitor center in collaboration with the Greater Port Huron Chamber of Commerce. This facility will be used to disseminate local tourism information and promote the tourism and economic development opportunities which exist within the Port Huron community.*

7.2.33 Wetlands

1.) Several commenters expressed concerns with the type of mitigation that will be implemented for impacted wetlands, asking what the impacts would be; if higher quality wetland might be protected in lieu of creating new wetlands; if new wetlands would remain in the watershed; and how new wetlands will be monitored and maintained free of invasive species. Commenters also asked how host communities could be involved by developing marginal wetlands as mitigation or reviewing mitigation plans.

The proposed improvements will impact 4.36 acres of wetlands. MDOT proposes constructing 7.10 acres of wetland mitigation on the proposed welcome center parcel. All proposed wetland mitigation for the wetlands impacted by this project would occur at the welcome center parcel, which is near the location of the impacted wetlands and in the same watershed as Recommended by the USACOE. MDOT will monitor the wetland mitigation area for five years.

The Study Team will also explore options to reduce wetland impacts during final design by closer matching existing roadway grades and using steeper slopes.

Monitoring the wetland mitigation site is necessary to determine if the wetland meets the MDEQ's performance standards. Monitoring of the wetland will include items such as water level measurements, vegetation sampling, and measurements of different habitat types, documentation of any wildlife activity, photographic records, and documentation of any problem areas. Annual reports will be submitted to the MDEQ.

2.) A commenter asked if walkways, signage, or other education initiatives will be incorporated into the construction of any mitigated wetlands so that the public will be encouraged to learn about the importance of wetlands.

No access is planned to the mitigated wetlands from the Michigan Welcome Center. This is in order to give the mitigated wetlands the highest opportunity to develop into and function as high quality wetlands. No additional public access is proposed, therefore no walkways or signage is proposed.

7.3 Community Comments

The Community Comments section addresses comments from local government agencies, business groups, private businesses, residents and other concerned individuals including:

City of Marysville
Greater Port Huron Chamber of Commerce
Fort Gratiot Business Association
The Smith Funeral Home

St. Clair River Binational Public Advisory Council
Village of Point Edward
Ontario Chamber of Commerce
Ontario Trucking

As in **Section 7.2** of this FEIS comment summaries were prepared due to the large number of comments received and the number of comments raising similar or overlapping issues. Comments and responses have been grouped by topic.

7.3.1 Aesthetics and Community Character

1.) Many commenters expressed concern with regard to public input and the need for aesthetically pleasing landscaping, retaining walls, lighting and facilities. They recommended that the new facilities reflect the character and historical significance of the city. They urged the design not resemble a “checkpoint” or warehouse, and asked that details for proposed aesthetic treatments be committed to as opposed to being described in generalities as to what “could” be proposed.

*See response in **Section 7.2.1**, comment 1.*

7.3.2 Air

1.) Many commenters voiced concern over the air quality impacts specifically from diesel trucks and/ or questioned the adequacy of the number of outbound inspection booths to move vehicles through in less than ten minutes.

MDOT will work with SEMCOG, MDEQ, the private sector and the community to create an action plan that includes short-term and long-term objectives aimed at reducing fugitive dust, diesel truck idling, fuel consumption, or diesel emissions to limit PM2.5 emissions in the area within one mile of the plaza. The action plan will identify priorities for the future federal aid eligible transportation project through program such as, Congestion, Mitigation and Air Quality (CMAQ) and the Midwest Clean Diesel Initiative. These activities will be implemented during design and construction phases, and sustained through the maintenance and operation of the facilities. Activities could also include outreach efforts to inform commercial operations and residents on air pollution control strategies. The actual projects will be generated from the community and its partners who will develop project proposals to implement these strategies.

7.3.3 Alternatives Considered/Additional Alternatives

1.) One commenter advised against the “No-Build” alternative citing the need for improvements to support growing traffic volumes and enhanced security.

Comment acknowledged.

2.) One commenter expressed concern about the validity of the DEIS, believing that the study was biased toward the build options from the beginning rather than the no-build option.

*The study properly followed the NEPA process. A wide range of alternatives were considered over the course of the study, including the No-Build Alternative. The study has determined that the current plaza can no longer accommodate current or anticipated CBP security operations and prevents CBP from fully completing their mission at the border. The reasons for why improvements are needed are detailed in **Chapter 1** of this FEIS. For the No-Build Alternative to be selected, the study would need to clearly demonstrate that the issues identified in the purpose and need could be accommodated on the current site. As discussed in **Chapters 1 and 2** of this FEIS, this was clearly not the case.*

3.) Several commenters suggested that a truck tunnel be built, or the old CN tunnel refurbished to accommodate truck traffic, reducing congestion on the bridge. Using the Grand Trunk CN property by Griswold was also suggested.

A tunnel is not considered to be a viable alternative for addressing the purpose and need for the project which is to expand the existing plaza in order to provide CBP more space in which to operate and conduct inspections. The twin bridges provide ample capacity for cross border traffic and the construction of a new tunnel or using the existing rail tunnel would require substantial impacts to connect to the freeway system and construct a new plaza. The current bridge congestion is due to constraints on the existing U.S. plaza.

4.) One commenter suggested transporting goods by rail as opposed to truck to reduce highway congestion and the need for expansion of the Port Huron Plaza.

Rail transportation across the country is also reaching capacity and experiencing congestion issues along major freight rail lines. The goods transported on rail are often different than those goods transported by truck. The commodities crossing in Port Huron are often related to the automotive industry which uses “just-in-time” deliveries to keep operating and storage costs low. Although some goods could be transported on rail if there was capacity, many goods are trucking dependent. Transporting more goods by rail would not eliminate the need for improvements on the plaza that address security, inspection and operational needs.

5.) A number of comments from local agencies, citizens, and Blue Water Bridge Canada were in support of the Preferred Alternative, stating that the Preferred Alternative would improve traffic flow, provide adequate capacity for future traffic resulting in fewer backups on the freeway and would benefit the area by bringing in new business.

Comments acknowledged.

7.3.4 Black River Bridge

1.) A number of commenters believe the Black River Bridge improvements should be evaluated independently of the plaza project and/or expressed concern with potential delay in improvements to the Black River Bridge.

Similar questions were asked by local government officials. Please see response in [Section 7.2.4, comment 1](#).

2.) One commenter wanted to know why the proposed Black River Bridge eastbound lanes are 300% wider and the westbound only 50% and believed the bridge should have four lanes westbound.

There are three dedicated lanes to Canada (eastbound) and three additional eastbound lanes for local traffic for a total of six eastbound lanes. These six lanes are needed to separate the local traffic from the international traffic. There are three westbound lanes across the Black River, which is adequate for the 2030 forecasting traffic volumes.

7.3.5 Community Impacts

1.) A number of commenters concluded that the project would create a barrier (either perceived or real) between the north and south end of the community. Mitigation steps towards mitigating city division were also requested.

Similar questions were asked by local government officials. Please see responses in [Section 7.2.5, comment 1](#).

2.) A few commenters voiced concern over measures to ensure that enhancements to life experience persist for the life of the improvement and the effects of the project on the quality of life.

Similar questions were asked by local government officials. Please see responses in [Section 7.2.5, comment 2](#).

3.) Several commenters were concerned about the impacts to those neighborhoods not directly impacted by the proposed project. They were concerned these neighborhoods will suffer “cumulative impacts” including loss of value, as they become the new “front row” to the plaza. Others voiced concern with the prolonged timeframe of uncertainty of potential acquisitions.

Similar questions were asked by local government officials. Please see responses in [Section 7.2.5, comment 3](#).

7.3.6 Economic

- 1.) **One commenter was concerned with MDOT's proposal to mitigate potential economic damage to the city of Port Huron.**

*In response to community concerns received from the release of the DEIS, the Study Team initiated a Project Enhancement and Mitigation (PEM) group comprised of representatives from the city of Port Huron, St. Clair County, Port Huron Township, federal and state elected officials, GSA, FHWA, and MDOT. This group met monthly from February thru September 2008 to work through issues raised by the local community regarding the proposed plaza and corridor improvements. A summary of the group activities and outcomes can be found in **Section 5.2** of this FEIS.*

As part of the mitigation of economic impacts, the State of Michigan will fund the development of an economic development plan for St. Clair County to assist with the potential development of new businesses in the Port Huron area.

The purpose of the plan is to facilitate the development of an Economic Development Strategic Plan for the city of Port Huron and St. Clair County through the assistance of the Michigan Department of Transportation. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. With an Economic Development Strategic Plan in place St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

- 2.) **A few commenters inquired about project costs the city of Port Huron would incur. Two commenters recommended a crossing toll increase benefiting the City; another suggested the city be exempt from any costs incurred for the project.**

*Similar questions were asked by local government officials. Please see responses in **Section 7.2.5**, comment 7.*

- 3.) **One commenter voiced concerns over the tax affects on the community.**

*Similar questions were asked by local government officials. Please see responses in **Section 7.2.7** comment 8.*

7.3.7 General

- 1.) **One commenter suggested that "a world-class international facility that houses various border, security, tourism and commerce agencies should be considered."**

MDOT and its partner agencies agree on the benefits of having "world-class" facilities at the Blue Water Bridge. Although there could be benefits to co-location of all these functions, it is imperative that secure

border inspection operations are separated from any commercial uses on the plaza. Any office space for tourism and commerce agencies would need to be downstream and securely separated from inspection facilities, accessible only by travelers who have been cleared for entry into the United States. Options were explored for locating these facilities on the plaza but their inclusion would have led to an enlarged plaza footprint and greater impacts, specifically west of the plaza. As a result, tourism and commerce agency locations will be located off of the plaza, with directional signage indicating their location.

GSA has over the past few years, been incorporating Design Excellence into their Leasing Program. As MDOT and GSA partner on the selection of an Architect/Engineer for this project, MDOT and GSA will make every effort to incorporate the Design Excellence Program into this project.

Below is a brief summary of GSA's Design Excellence Program:

"In meeting the challenges associated with the stewardship of our buildings, GSA's performance standard is Design Excellence – buildings that express the vision, leadership, and commitment of the government to serving the public and the values of the nation. More, specifically, Design Excellence in the Public Building Service means:

- Providing best value to our customer agencies and the American taxpayer.*
- Developing safe, productive, and attractive workplaces.*
- Operating efficiently and effectively-keeping projects on time and on budget.*
- Ensuring that projects respond positively to national urban and environmental policies.*
- Selecting America's best designers and artists to create facilities that ultimately become respected landmarks.*

The Public Building Service approach is holistic, incorporating expertise in many areas- architecture, urban design, landscape architecture, interior design, art, engineering, construction, security, sustainability, and workplace design. Design Excellence is about using this expertise to deliver projects that are exceptional-models others seek to emulate. In this effort, Design Excellence is neither veneer nor luxury. It is an integral feature of the GSA culture and how the Public Buildings Service addresses its work."

2.) A few commenters were concerned with the amount of time the process has taken thus far and would like to see it move forward.

The Study Team understands the importance of improving facilities in a timely manner. The length of the planning and NEPA process is a reflection of the need to address a wide-variety of complex local, national and international issues in planning and evaluating plaza improvements.

3.) A few commenters did not support the plaza expansion within the city of Port Huron. They suggested another option be investigated.

Section 2.1 Alternatives Development, in the DEIS explains the alternative development process of the project and why other alternatives were not carried forward.

4.) Two commenters were concerned with the passport requirements to cross the border and suggested an ID card to make it easier.

These issues are beyond the scope of this project.

5.) One commenter asked, “what were the dates and cost of the most recent Blue Water Bridge and Plaza construction projects over the past 15 years? Include landscaping and concrete barrier and other security measures.”

The current plaza was constructed in the early 1990’s. The second bridge over the St. Clair River was built in 1997 at a cost of approximately \$41.3 million (for the Michigan half).

6.) A few commenters disagreed with the size of the proposed expansion and supported the No-Build alternative, proposing instead upgrades or minor expansion of the current facility.

The plaza size has been reduced from 65 acres in the DEIS, to 56 acres See Section 2.3.5 of this FEIS for a more-detailed discussion on plaza size justification. Selecting the No-Build Alternative would not address the severe deficiencies and substantial issues with the current plaza and I-94/I-69 corridor discussed in Chapter 1 of this FEIS.

7.) A number of people expressed a preference for the Township Alternative west of the existing plaza.

Comment Acknowledged.

8.) One commenter suggested rezoning the area to commercial/industrial and that local people should be used for construction.

Zoning is a local government land use decision; however it must be recognized that even with rezoning, at some point there remains a transition between commercial/industrial and existing residential land uses. MDOT and FHWA will seek the best possible value from their investments when tendering construction projects and like any other project, there is no guarantee that local firms would be selected and local materials would be used.

9.) One commenter wanted to know who the contractors would be for the new plaza and if engineering plans had already been made.

Design engineering plans will commence following publication of this FEIS and Record of Decision. A construction contractor will be selected through MDOT advertised competitive contracting procedures.

10.) One commenter suggested, “Independently performed basement surveys should be honored for those residences/businesses that are not identified by MDOT to be prone to construction-related vibration damage.”

*In areas where construction vibration is anticipated, basement surveys will be conducted before construction begins to document any damage caused by highway construction. Identification of properties to be offered basement surveys will be determined by MDOT during the design phase. Contingent upon property owner approval, MDOT, in consultation with the selected construction contractor, will make assessments as to which structures will have a basement survey completed. MDOT's contractor will be responsible for the costs associated with the required basement surveys. These surveys will be completed at the onset of the construction phase. This commitment has been added to the Mitigation Green Sheet found in **Chapter 5** of this FEIS.*

7.3.8 Hazardous Materials

1.) Three commenters were concerned as to how environmental spills will be contained and public drinking water protected from such spills.

*Similar questions were asked by local government officials. Please see response to comment 1 in **Section 7.2.12**.*

2.) One commenter questioned, “Why did the report not include known hazardous materials transportation routes as potential environmental conditions” and what would the impacts of these routes be to the project area?

A recognized environmental condition means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property.

Recognized environmental conditions do not include de minimis conditions that generally do not present a material risk of harm to public health or the environment, and that generally would not be subject of an enforcement action if brought to the attention of appropriate government agencies. Conditions determined to be de minimis are not recognized environmental conditions. A de minimis contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.

A hazardous material route is not considered a recognized environmental condition as the route and risk would be the same regardless if the project moves forward or not and the movement of hazardous materials along a route does not constitute an enforceable action.

3.) A few commenters questioned how local response agencies will alert the public to spills or the release of airborne hazardous substances and if fire suppression and other

containment facilities would be utilized to avoid the entry of contaminants into air, sewer, and river systems.

Similar questions were asked by local government officials. Please see response to comment 2 in Section 7.2.12.

7.3.9 Health and Safety

1.) One commenter was concerned about the potential health impacts and risks of a fire or other incidents at the Plaza.

The existing plaza and proposed plaza have a hazardous materials containment area for potential vehicle incidents. Currently there is an approximate 30,000 gallon tank under the existing plaza that run-off can be routed to in case a hazardous material spill occurs. A similar system will be developed for the new plaza in the final design for hazardous material retention. The State of Michigan contracts for fire and emergency response services from the city of Port Huron in case of a fire or other types of incidents.

2.) One commenter questioned how and where solid waste generated during the construction process be disposed of?

During the construction process the St. Clair County's Solid Waste Management Plan will be followed and solid waste will be disposed of as the plan outlines. In addition, MDOT follows a standard set of procedures for disposing surplus or unsuitable materials. When surplus or unsuitable material is to be disposed of outside of the right-of-way, the contractor shall obtain and file with MDOT written permission from the owner of the property on which the material is to be placed. In addition, no surplus or unsuitable material is to be permanently disposed of in any public or private wetland area, watercourse, or floodplain. No temporary disposal of material will occur in any public or private wetland area, watercourse, or floodplain without prior approval (and permit) by the appropriate resource agencies and the Federal Highway Administration.

3.) One commenter concluded that the DEIS does not adequately address how additional emergency services will be financed or what financial impact the greater demand for emergency services and public works may have on the city of Port Huron.

*MDOT currently provides annual payments of \$200,000 to the city of Port Huron for emergency response services. MDOT will increase this payment to \$300,000 annually to continue to provide these services for the expanded plaza area. See **Chapter 5**, of this FEIS for addition mitigation information.*

4.) Several commenters expressed concern regarding routes for emergency response vehicles and law enforcement. One commenter asked, what are the expected routes for these agencies both within and through the project footprint? How will these changes impact response times, upon completion of the project? There was particular concern with regard the potential EMS traffic delay on the new Pine Grove Avenue to areas north of the plaza.

The Recommended Alternative would have little or no effect on emergency service response times to and from the plaza. The new plaza would have specific entrances and exits for emergency responders according to a plan to be developed with local agencies. There are two major north-south roadways through this area, 10th Avenue (four lanes) and Pine Grove Avenue (five lanes). This alternative would relocate Pine Grove Avenue to the west from its intersection with 10th Avenue and tie into the M-25 connector. This will eliminate the portion of Pine Grove Avenue that runs under the plaza. Emergency service responders will be able to access the neighborhoods and businesses north and south of the plaza via 10th Avenue and Pine Grove Avenue. Emergency service along I-94/I-69 would be improved with better separation of local and plaza traffic.

5.) One commenter expressed concern “about possible increases in the time it will take to get to the hospitals during the construction phase.” Another Commenter stated “Sufficient ingress/egress must be provided in the construction zone for emergency routes for law enforcement, fire and EMS.”

*As a part of MDOT’s maintenance of traffic planning efforts all efforts will be taken to minimize impacts to critical north-south routes and emergency service access, to the greatest extent possible. MDOT will follow ASHTO maintenance of traffic standards to ensure that emergency routes for law enforcement, fire, ambulances and other emergency services will be easily accessible. Maintenance of traffic is fully discussed in this FEIS, **Section 3.17 Construction Impacts**.*

MDOT will coordinate with emergency service providers prior to the beginning of construction and at the beginning of new phases of construction. Communication will be maintained throughout construction. Adjustments to emergency response plans will be developed based on project activity.

7.3.10 Historical Properties

1.) Several commenters expressed concerns regarding potentially historical or culturally significant structures or sites that may be within the proposed project footprint. They inquired as to how these sites would be preserved.

*Similar questions were asked by local government officials. Please see response in **Section 7.2.14, comment 1**.*

7.3.11 Noise

1.) Three commenters were concerned about the additional noise of idling and accelerating trucks at the expanded plaza and whether this was incorporated into the noise analysis.

*This comment has been addressed in **Section 7.2.19** of the Comments and Response section of this FEIS.*

- 2.) Several commenters inquired as to site specific noise impacts. One asked if post construction noise would be monitored and action taken if exceeding standards?

This comment has been addressed in Section 7.2.19 of the Comments and Response section of this FEIS.

7.3.12 Pedestrian and Non-Motorized Access

- 1.) One commenter was concerned with the roundabout design not taking into consideration crossings by pedestrians and bicyclists and suggested stoplights instead.

The proposed roundabout shown in the DEIS for Pine Grove Avenue has been removed. The roundabouts at Water Street are still proposed. A pedestrian crossing location is currently proposed south of the southern roundabout which will allow bicyclists and pedestrians the ability to cross Water Street.

- 2.) Two commenters were concerned with a pedestrian crossing to Sarnia.

Pedestrian crossings of the Blue Water Bridge are not allowed by the United States or Canada.

7.3.13 Project Design

- 1.) Two commenters disliked the idea of a roundabout, expressing concerns about accidents or confusion at other locations they've used.

Current studies show that roundabouts have fewer conflict points in comparison to conventional intersections. The potential for hazardous conflicts, such as right angle and left turn head on crashes is eliminated with roundabout use. Although driver confusion is a concern with roundabouts, proper signing and design will reduce this likelihood.

7.3.14 Project Funding

- 1.) A few commenters inquired as to who the force behind the project was and who was funding it. Is it Federal, State or local government?

The project is a joint effort proposed by several federal agencies and MDOT. The Blue Water Bridge and Plaza are owned by the State of Michigan (MDOT) and is leased to U.S. Customs and Border Protection (CBP) through the General Services Administration (GSA). As the owners of the plaza, MDOT is the lead state agency for the project and the Federal Highway Administration (FHWA) is the lead federal agency. As discussed in Chapter 1 of this FEIS one of the principal needs for the project is the substandard size of the plaza which prevents CBP from carry out their mission to the fullest extent that is expected of them from the Department of Homeland Security. These agencies have determined the Blue Water Bridge Plaza to be a priority project for their respective agencies and are working together cooperatively to complete this important project.

Funding for the design, ROW, and construction phases of the project will likely utilize funds from the following sources:

- *Federal Aid SAFETEA LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) Earmarks*
- *Federal Aid (Corridor and Border Improvement Program)*
- *Bonds backed by revenue from an updated GSA lease, an updated Duty Free lease, and BWB Toll Revenue.*

*Any proposed toll increases on the U.S. side of the Blue Water Bridge will be completed in accordance with the existing toll agreement. See **Section 2.8** of this FEIS for a more-detailed discussion.*

Funding for the project will come from a mix of federal and state funds along with tolls and leases payments from the plaza agencies and the duty free store. For additional information, see the Executive Summary in this FEIS.

2.) A few commenters voiced concerns over the amount of money already spent and that which will be spent on the project and expressed the concern that U.S. tax dollars were being utilized to pay for improvements benefitting big business and international interests.

Comment Acknowledged.

7.3.15 Public Involvement and Coordination

1.) One commenter believed that MDOT's project newsletter did not adequately address his concerns with noise, air quality, possible chemical leaks, access, depreciation, relocations and like matters. The individual also felt the project didn't account for resident lifestyles and economic status.

The purpose of the project newsletters is to inform the public of an upcoming public meeting opportunity and to summarize key issues surrounding the project. The DEIS contains the specifics related to project impacts. It was not the intent of the newsletter to provide detailed specifics of the project. Discussion of the issues raised by the commenter are found in various sections of the DEIS and were discussed at the Public Meeting, Community Workshop and Public Hearing.

2.) One commenter casts doubt on MDOT's desire to involve the public.

The Study Team held nine public information meetings or workshops to provide study information and receive comments from the general public, hundreds of local residents, business owners, and officials attend these meetings. MDOT notified people by issuing press releases in the local newspaper, conducting interviews with local media, and mailing informational brochures to over 400 households located in the vicinity of the plaza. Brochures for each meeting were also distributed to key city, township, and county offices and to churches in the Study Area. All of the meetings were held at transit

and disabled accessible facilities in Port Huron, Michigan. The meetings were held in a large hall using an open forum format. Members of the public could visit stations and discuss different aspects of the proposed project (study process, traffic, environmental constraints, etc.) with project team members. All attendees were encouraged to fill out comment forms.

MDOT also formed a study Advisory Committee at the beginning of the project. The Advisory Committee provided expertise and input regarding pertinent issues related to the Blue Water Bridge Plaza Study. The Advisory Committee consisted of a core group of stakeholders representing plaza inspection agencies, local and state officials, Canadian officials, private firms, local agencies and key representatives from the local community. The general public was represented through their elected local officials and various local agencies that participated in the advisory committee. MDOT ensures that the concerns of residents were represented in the Advisory Committee by inviting local official and local agencies to be active members of the Advisory Committee.

*Access to information on the Blue Water Bridge Plaza Study can be made 24 hours a day by visiting the project website (www.michigan.gov/bluewaterbridgeproject). Comments can also be submitted via the website. Comments and questions can also be submitting by calling the toll-free project hotline (888-955-3515) from 8 a.m. to 5p.m. weekdays and after hours on voice mail. Comments can also be submitted at the Port Huron Transportation Service Center located at 2127 11th Avenue, Port Huron. Comments and questions will be addressed by members of the Study Team. The Study Team is available to discuss questions and concerns Monday through Friday from 8 a.m. to 5 p.m. The project website will continue to be maintained through the life of the project and for some time after the project is completed. Responses to comments can be further clarified through calling the hotline and speaking directly with a member of the study team. For more details on public and agency coordination, see **Chapter 6**, of this FEIS.*

3.) One commenter was disappointed to arrive late to the public hearing due to the incorrect posting of the start time on the MDOT website.

Comment acknowledged.

7.3.16 Right of Way Acquisition and Relocations

1.) One commenter urged MDOT to “reconsider its decision to cancel its fast track policy of property acquisition” and allow the city to continue to collect property taxes for the difference in time between standard and fast track acquisition.

Although the early acquisition program was canceled, MDOT was able to advance some “hardship” acquisitions for property owners specifically requesting acquisition and demonstrating hardship conditions. MDOT is committed to assisting qualified hardship cases and will advance them as funds become available.

2.) Numerous commenters requested more detail regarding potential relocation sites for both homes and businesses and the availability of lower-income residences. Analysis of

impacts for the replacement residential, business and non-profit organization property locations was also requested.

MDOT is required to follow all state and federal property acquisition statutes which assure property owners rights are upheld in the highest professional means possible. MDOT makes a good faith offer based on fair market value to both owners and tenants, who are then free to choose their replacement location. Relocation advisory services are likewise extended to both parties. All benefits will be explained to both owners and tenants, who are then responsible to make a final decision on their relocation.

MDOT policies and practices require adequate residential and commercial property be available to impacted property owners on every project. Typically, owners are not required to relocate until they have obtained a suitable replacement location.

*The Study Team conducted an enhanced analysis of potential replacement housing within the city of Port Huron and other communities within the vicinity of the project. This analysis which is also contained in the Conceptual Stage Relocation Plan identified suitable replacement housing available for the population displaced by the project. This analysis identified the number of homes available for sale in specific neighborhoods and communities and potential differences in housing stock between available homes and those being acquired. This analysis is located in **Chapter 3, Section 3.6.1: What is the Current Real Estate market in St. Clair?** of the DEIS.*

Businesses affected by projects can typically be broken down into two types of properties: “destination” properties and “non-destination properties.” Destination properties are the kind of businesses that typically will receive patronage from customers who are less dependent upon the exact location of the business. A doctor’s office, for example, is a “destination” business that would be visited by patients regardless of its immediate location (assuming it is still within the same general vicinity and reasonably accessible to the patients). In contrast, as a non-destination business, a fast-food restaurant or gas station might be more of an impulse visit for motorists, and the location of such a business would be more critical to ensure that customers are able to access the property. Such issues are being addressed with property owners individually by MDOT real estate personnel.

3.) One commenter was concerned with keeping businesses within the city of Port Huron and whether a business district would be created

MDOT is available to assist relocated businesses and residents find appropriate housing or commercial sites as close to their original location as is possible, but if residents or businesses wish to move, MDOT cannot compel them to remain in the same area. MDOT follows state and federal guidelines, which allow owner flexibility in the relocation process. MDOT makes the good faith offer based on fair market value to both owners and tenants, who are then free to choose their replacement location. Relocation advisory services are extended to both parties.

Under the Recommended Alternative, the relocated Pine Grove Avenue provides new frontage access to existing vacant or underutilized business locations north and south of the plaza. This may be an

attractive location for new or relocated businesses, providing economic redevelopment opportunities around the plaza.

As part of the mitigation of economic impacts, the State of Michigan will fund the development of an economic development plan for St. Clair County to assist with the potential development of new businesses in the Port Huron area.

The purpose of the plan is to facilitate the development of an Economic Development Strategic Plan for the city of Port Huron and St. Clair County through the assistance of the Michigan Department of Transportation. This strategic plan would build upon existing strategic advantages, international trade opportunities, and the community's extensive transportation assets that can contribute to a stronger more vibrant economy for the future. With an Economic Development Strategic Plan in place St. Clair County and Port Huron will be better positioned to build on the competitiveness of this region creating a stronger and more prosperous economy by working to achieve common goals and action strategies.

The creation of a designated business district and any joint marketing efforts for a business district would be directed by the city of Port Huron and local business owners.

7.3.17 Security

1.) One commenter inquired as to the percentage of trucks that undergo X-ray inspection and how this affects the time needed for secondary inspections.

Many trucks are required to undergo NII in the secondary inspection area which does require additional time. CBP does not reveal exact percentages for security reasons. During peak times this process can result in congestion in the secondary area on the current plaza. The new plaza will provide adequate space for the trucks to be scanned and for CBP to complete their mission. Up to four NII machines are required on the new plaza

2.) Two commenters voiced concerns regarding the number of truck/car inspections that will be handled per day at the new expanded plaza and one inquired as to the percentage of vehicles using NEXUS and FAST programs and plans to expand them.

Approximately 5,700 cars and 2,000 trucks cross the bridge daily into the United States (August 2008). All vehicles coming into the U.S. go through primary inspection and screening. The current enrollment level for NEXUS 17% and FAST is 17 % (August, 2008). Both programs are expected to be expanded in the future to provide better efficient for vehicles crossing at the border. The proposed plaza and improvements along I-94/I-69 will efficiently accommodate this expansion of the FAST/NEXUS programs.

3.) Two commenters had voiced general concerns regarding border security and asked, "Has any terror related incident, of any kind been impeded or uncovered resulting from the U.S. Customs process at the Blue Water Bridge, pre or post 911?."

This information is not available to the Study Team due to security reasons. However, CBP has indicated that unlawful people and contraband are routinely discovered at the Blue Water Bridge.

4.) A few commenters questioned why having the plaza at ground level was safer than the current elevated plaza. One would like to see the plaza restricted to cars and vacation vehicles.

Pine Grove Avenue running under the main plaza is a security concern due to its location and volume of vehicles. CBP has indicated the new plaza cannot have a major road running beneath it. Removing truck traffic from the Blue Water Bridge is not possible as it would require a new bridge over the St. Clair River and would not be practical from either an economic or goods movement perspective. Facilitating the movement of commercial goods is an important part of the Blue Water Bridge border crossing.

5.) A few commenters believed that a new plaza would not provide any additional security and believed it would be a waste of money, because of other less secure means available to cross the border. One supported the corridor and local access improvements but not the plaza improvements.

Comment Acknowledged

6.) Numerous commenters expressed concern regarding the number of inspection booths and the level of CBP staffing at the booths. Others requested that NEXUS and FAST lanes be kept open longer.

Similar questions were asked by local government officials. Please see response in Section 7.2.29, comment 2.

7.) Several commenters questioned why “reverse inspection” was eliminated as an alternative suggesting that this option should be further analyzed.

Similar questions were asked by local government officials. Please see response in Section 7.2.29, comment 3.

8.) One commenter suggested pre-screening of vehicles to facilitate faster inspection.

CBP has already implemented an advance program to pre-screen trucks that require that require paperwork to be transmitted to CBP by carriers hours before the truck arrives at the border. Formal pre-screening activities would essentially require reverse inspection involving the movement of U.S. inspection facilities to Canada and vice-versa. This option was eliminated due to national sovereign issues that are beyond the scope of this study.

9.) One commenter suggested the use of truck scanning technology.

One fixed and one mobile non-intrusive inspection NII/scanning facility has been installed at the existing plaza. The Recommended Alternative includes a minimum of two permanent truck-scanning facilities and two mobile facilities positioned in a manner to facilitate more efficient inspection, processing and queuing of vehicle.

7.3.18 Signals and Signing

1.) A number of commenters recommended better signage be provided along the corridor, on the plaza and along Pine Grove Avenue.

During the design phase a signing plan will be developed which will address signing issues along the I-94/I-69 corridor and Pine Grove Avenue corridor as well as on the proposed plaza. MDOT will work with local officials throughout the design and construction to provide improved signing around the plaza area.

7.3.19 Traffic

1.) One commenter concluded that both during and after project construction, accessibility to their business at 1525 Hancock Street between Pine Grove Avenue and 10th Avenue will be limited or negated. The evaluation process for traffic rerouting was also questioned and information was requested on the time periods for each construction stage.

*All of the concerns over the plaza staging plans along Hancock and 10th Ave. are addressed with the revised staging plan described in **Section 5.18** of this FEIS. The plan proposes to build relocated Pine Grove Avenue first followed by the plaza, with minor impacts to traffic along 10th Ave. and Hancock Street. Access will be maintained to all businesses not relocated, both during and post construction. Business owners will also be coordinated with during the construction phase to provide updated information and schedule.*

2.) A commenter requested that MDOT commit in writing to not divert any bridge-bound traffic off I-94 onto local streets. It was requested that the plaza allow on and off traffic from Pine Grove Avenue, and a concern was expressed that traffic delay on the M-25 connector during construction would result in further cut-through traffic in adjoining neighborhoods.

*As described in **Section 5.18** of this FEIS, MDOT's maintenance of traffic planning efforts will seek to minimize access disruptions to local businesses. MDOT will work closely with the city of Port Huron and the St. Clair County Road Commission to finalize these plans prior to the beginning of construction. Detours if needed will be signaled to minimize relocation of traffic to local neighborhood streets during construction. The new plaza will have full on and off access to Pine Grove Avenue.*

3.) A couple of commenter suggested booths should be 2 to 3 deep to process cars/trucks two to three at a time per lane. It was also asked why not “build up?” and staff all inspection booths at all times.

Customs and Border Protection (CBP) management at the ports of entry determine the level of staffing based on location specific criteria. The booths at the Blue Water Bridge Plaza are fully staffed during peak times.

The port of entry has 13 primary lane booths which are fully staffed during peak traffic hours. For national security and law enforcement reasons, CBP does not publicly disclose the number of CBP officers located at U.S. Ports of Entry (POEs). CBP has adequate staffing to fully staff all 13 primary lane booths during peak hours. Staffing could not be increased to “speed things up,” as noted; the POE is fully staffed during peak traffic hours. The Study Team has explored a large number of layout options including staggered booths to develop a layout that meets security requirements while processing border crossers as efficiently as possible.

4.) A number of persons commented on the existing truck/auto traffic weave and wanted assurance it would be eliminated suggested eliminating the current traffic weave.

The proposed improvements will eliminate two critical weaves. First is the weave conflict on I-94/I-69 between Canada bound traffic and local traffic at the Black River Bridge. The Canadian bound traffic will be directed to the center three lanes while the local traffic is on the right. The lanes will be separated by a concrete barrier. The car/truck weave that takes place on the Blue Water Bridge over the St. Clair River when entering the United States will also be eliminated. The new configuration of the plaza will put trucks in the right lanes and cars will be on the left.

5.) A few commenters suggested separate lanes and inspection facilities for trucks and cars. One suggested directing trucks across one bridge and cars on the other, and inspecting the trucks separately in the township.

*Due to the freeway configuration on both sides of the border and traffic weave issues, traffic cannot be separated by car and truck by bridge. See **Section 2.1, Alternatives Considered and Dismissed**, in the **DEIS**.*

6.) A number of commenters voiced concerns over the amount of truck traffic at the Blue Water Bridge. The commenters suggested reducing truck traffic, by reducing the number of Canadian trash trucks or directing truck traffic to a different point of entry would eliminate the need for an expanded plaza. One commenter requested data on processing times, CBP staffing and other data that the commenter thought might affect plaza size and need.

Truckers make decisions regarding the use of border crossing locations based upon many factors, not the least of which is proximity to their destination and travel time. The nearest alternate commercial border crossing is located in Detroit. This location also resides within a developed commercial area, processes

even more commercial freight than does the Blue Water Bridge Plaza. The Michigan Department of Transportation is also studying the addition of another land port crossing of the Detroit River. This is illustrative of the growing importance of international commerce to the state and nation, as well as local industry and employment.

The Canadian trash trucks crossing at the Blue Water Bridge account for only 3% of the commercial traffic crossing the bridge. While there continues to be political debate on the value and impact of this use, the vehicles themselves are small in size by comparison to a commercial tractor trailer and their elimination would have little effect on the plaza operations and no effect on the plaza size or need.

As previously stated, CBP operational data are not public information for security reasons. Staffing size has little effect on plaza size and need, other than the need for more parking and building area proportionate to any increases in staffing. Modifications to traffic volumes would also have little effect on plaza size as the need is most affected by improved security measures, operational safety improvements, and improvements to vehicle maneuvering, sight clearance, and CBP response time to increase the overall operational efficiency and security.

7.) A few commenters questioned if streets would be closed under the bridge.

The Recommended Alternative will not require the closing of any streets under the bridge. However, MDOT is planning to close State Street, realign Gratiot Street and cul-de-sac Forest Street as part of a separate project not related to the plaza expansion project.

8.) One commenter was concerned about the possible closing of Pine Grove Avenue or its relocation and its possible adverse affect on downtown business.

While the Recommended Alternative relocates Pine Grove Avenue to the west it actually provides more direct access from I-94/I-69 to downtown Port Huron than exists today, and much improved access for inbound traffic from the plaza to downtown as was requested by the City.

As a part of MDOT's maintenance of traffic planning efforts all efforts will be taken to minimize access disruptions to local businesses. MDOT will work closely with the city of Port Huron and the St. Clair Road Commission to finalize these plans prior to the beginning of construction.

9.) A number of commenters expressed concerns regarding the proposed roundabout, along Pine Grove Avenue.

*Similar questions were asked by local government officials. Please see response in **Section 7.2.14, comment 4.***

7.3.20 Michigan Welcome Center

1.) Many commenters were concerned with the proposed placement of the welcome center as it is only accessible by those travelling west. They suggested the welcome center be placed in the median to serve both east and west travelers and to allow greater access to Port Huron businesses, restaurants and points of interest.

Similar questions were asked by local government officials. Please see responses in [Section 7.2.3](#).

2) One commenter suggested a one or two way drive from the welcome center north to west Water Street.

A connection from the new Michigan Welcome Center north to West Water Street was considered. However, this would be considered a break in access to the freeway system and is not allowed by the Federal Highway Administration unless stringent criteria are met. In addition, creating the drive to the north would create new environmental and social impacts to the residents living along West Water Street.

Preparers and Reviewers

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Name	Education and Experience	Primary Responsibilities
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Kelly Ramirez	B.S. Business Marketing-Advertising 20 years MDOT Real Estate Experience	MDOT Relocation Specialist
Matthew DeLong	B.S. and M.S. Civil Engineering 18 yrs MDOT experience 23 years State of Michigan	MDOT Real Estate Administrator
William Swagler	Bachelor's Degree in Business Administration 22 years experience in Real Estate.	MDOT Real Estate Cost Estimator
Teresa Vanis	B.A. Advertising 18 years MDOT Real Estate experience	MDOT Local Agency Coordination and Relocation
Susan Fredricks	32 years in Real Estate experience 15 years Right-Of-Way	MDOT Region Acquisition Manager
Glenn McKennon	34 years Real Estate experience 17 years State Certified real estate appraiser 18 year MDOT experience	MDOT Appraisal Project manager
Pamela Evans	BSW 28 years MDOT experience	MDOT Acquisition Project Manager
<i>Federal Highway Administration</i>		
James R. Cramer	B.S. Civil Engineering 38 years experience	Planning Program Manager/Air Quality Specialist
Mary Finch	B.S. Management A.A.S. Accounting and Human Services Master Compliance Administrator (MCA) Certification 10 years FAA experience 7 years FHWA experience	Civil Rights Program Manager
Ryan Rizzo	B.S. Civil Engineering M.S. Engineering Associate Certificate Project Management 24 years experience in transportation planning and engineering	Major Project Manager
David T. Williams	B.A. Environmental Policy and Technology M.P.A. Environmental Policy and Natural Resources Management 19 years environmental experience 9 years NEPA experience	Environmental Program Manager

Christopher Dingman	B.S. Public Administration MCRP Community and Regional Planning 13 years transportation planning experience 1 year FHWA experience	Transportation Planner and Research Coordinator
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The Final Environmental Impact Statement is being distributed to the following federal, state, regional and local agencies and interested parties for their review and comment.

Federal Agencies

- Advisory Council on Historic Preservation
- U.S. Army Corps of Engineers, Detroit District
- U.S. Coast Guard, Ninth District, Cleveland, OH
- U.S. Customs and Border Protection, Port Huron, MI
- U.S. Customs and Border Protection, Indianapolis, IN
- U.S. Department of Agriculture, Natural Resource Conservation Service, Michigan State Conservationist
- U.S. Department of Commerce, NEPA Coordinator, Washington, D.C.
- U.S. Department of Energy, Office of NEPA Project Assistance, Washington, D.C.
- U.S. Department of Health and Human Services, Center for Disease Control
- U.S. Department of Homeland Security, Washington, D.C.
- U.S. Department of Housing and Urban Development, Area Director
- U.S. Department of Interior, Bureau of Indian Affairs, Area Director, Fort Snelling, MN
- U.S. Department of Interior, Bureau of Indian Affairs, Michigan Agency, Sault Ste. Marie, MI
- U.S. Department of Interior, Fish and Wildlife Service, East Lansing Field Office
- U.S. Department of Interior, National Park Service Midwest Region
- U.S. Department of Transportation, Federal Aviation Administration, Michigan Section
- U.S. Department of Transportation, Federal Highway Administration, Midwestern Resource Center, Olympia Fields, IL
- U.S. Environmental Protection Agency, Filing Section, Washington, D.C.
- U.S. Environmental Protection Agency, Region 5, Chicago, IL

- U.S. Federal Emergency Management Agency, Region 5, Chicago, IL
- U.S. General Services Administration, Great Lakes Region, Chicago, IL

U.S. Senators and Representatives

- Senator Debbie Stabenow, MI
- Senator Carl Levin, MI
- Representative Candice Miller, 10th District, MI

State Senators and Representatives

- Representative Daniel Acciavatti, District 32, MI
- Representative Phil Pavlov, District 81, MI
- Representative John Espinoza, District 83, MI
- Senator Jud Gilbert, District 25, MI

Canadian Agencies and Local Jurisdictions

- Blue Water Bridge Canada
- Canada Border Services Agency, Ottawa, ON
- Ontario Ministry of Transportation, London, ON
- Transport Canada, Ottawa, ON
- City of Sarnia, ON
- Village of Point Edward, ON

State Agencies, Michigan

- Michigan Department of Agriculture
- Michigan Economic Development Corporation
- Michigan Department of Environmental Quality
- Michigan Department of Community Health
- Michigan Department of History, Arts, and Library, State Historic Preservation Officer
- Michigan Department of Natural Resources
- Michigan Department of Transportation
- Michigan Environmental Science Board
- Michigan Family Independence Agency
- Michigan State Housing Development Authority

Local Jurisdictions and Agencies, Michigan

St. Clair County

- St. Clair County Road Commission
- St. Clair County Board of Commissioners

- St. Clair County Drain Commissioner
- St. Clair County Transportation Study
- St. Clair County Clerk
- St. Clair County Economic Development Department
- St. Clair County Emergency Services/Management

City of Port Huron

- City of Port Huron Office of the City Engineer
- City of Port Huron Office of the City Manager
- City of Port Huron Office of the Director of Finance
- City of Port Huron Office of the Fire Chief
- City of Port Huron Police Department
- City of Port Huron Planning and Development
- City of Port Huron Council/Clerk

Townships

- Port Huron Township
- Fort Gratiot Township
- Kimball Township

Other Agencies and Interest Groups

- Canadian / American Border Trade Alliance
- Clean Water Action
- DTE Energy Company
- Economic Development Alliance of St. Clair County
- Great Lakes Trade Corridor Association
- Michigan Environmental Council
- Michigan Gas Utilities
- Michigan Infrastructure & Transportation Association
- Michigan Municipal League
- Michigan Townships Association
- Michigan United Conservation Clubs
- National Wildlife Federation, Great Lakes Chapter
- Port Huron Area Public School District
- Port Huron Chamber of Commerce
- Sierra Club, Mackinac Chapter
- Southeast Michigan Council of Governments
- West Michigan Environmental Action Council
- Ziibiwing Cultural Society

100-Year Flood Elevation: The 100-year flood elevation is defined by the Federal Emergency Management Agency (FEMA) as the flood elevation that has a one-percent chance of being equaled or exceeded (inundated) in any given year. Thus, despite its name, a 100-year flood could occur more than once in a relatively short period of time. See also floodplain.

Air Quality Index (AQI): The AQI is a guide for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health concerns you should be aware of. The AQI focuses on health effects that can happen within a few hours or days after breathing polluted air. The U.S. Environmental Protection Agency (EPA) uses the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, USEPA has established national air quality standards to protect against harmful health effects.

Alternative: Alternatives are different options under consideration for a project. By evaluating the impacts associated with different Alternatives, a decision can be made as to which one will be the “Recommended Alternative.” There have been a number of Alternatives considered as part of this project, and all the terms below are defined separately as well:

- Illustrative Alternatives
- No-Build Alternative
- Build Alternatives (City East, City West, Township)

American Association of State Highway and Transportation Officials (AASHTO): A nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia and Puerto Rico whose primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.

American Society for Testing and Materials (ASTM): Founded in 1898, ASTM is a nonprofit organization providing standards that are accepted and used in research and development, product testing, quality systems, and commercial transactions around the globe. In over 130 varied industry areas, ASTM standards serve as the basis for manufacturing, procurement, and regulatory activities.

Annual Average Daily Traffic (AADT): The average number of vehicles passing a fixed point on a roadway in a 24-hour time frame. To reflect daily variation over time, AADT averages the daily traffic volumes over the course of a year. Used as a measure of traffic volume on a roadway. AADT is essentially the yearly traffic volume divided by 365.

Archaeological Site: The location of past cultural activity which could be used to describe and explain the nature and evolution of cultural systems; a defined space with mainly continuous archaeological evidence. Most archaeological resources are below ground level and yield information important in history or pre-history.

Architectural Resource: A building or other structure with potential historic significance based on its age, type, or its association with a person(s) or event(s). Such a property may have the distinctive characteristics of a type, period, or method of construction or may represent the works of a master or may possess high artistic values.

Area of Potential Effect (APE): In the context of cultural resources, the APE is the geographic area or areas within which a project may directly or indirectly cause alterations in the character or use of historic or archaeological resources, if any such properties exist. The area of potential effect is influenced by the size and nature of a project and may be different for different kinds of effects caused by the project.

Blue Water Bridge Canada (BWBC): The Canadian portion of the Blue Water Bridge is owned and operated by Blue Water Bridge Canada (BWBC). The BWBC was created as a corporation in 1964 by the Blue Water Bridge Authority Act and is responsible for the Canadian plaza operations, maintenance of the Canadian side of the bridge, capital infrastructure improvements, and toll collection. Specifically, the BWBC is responsible for the toll collection for westbound traffic (Canada to United States) and the provision of toll collection booths, Customs & Immigration booths, and bridge capacity.

Build Alternatives: A collective description of all Alternatives that include physical construction and therefore are distinct from the No-Build Alternative. For this document, the Build Alternatives are the City East, City West, and Township Alternatives.

Canada Border Services Agency (CBSA): Created December 12, 2003, the CBSA is responsible for providing integrated border services that support national security priorities and facilitate the free flow of persons and goods, into Canada including animals and plants, which meet all legislated requirements under the program legislation.

Clean Air Act Amendments (CAAA): The CAAA is legislation designed to curb three major threats to the nation's environment and to the health of Americans: acid rain, urban air pollution, and toxic air emissions. It called for establishing a national permits program to make the law more workable, and an improved enforcement program to help ensure better compliance with the Act. The original Clean Air Act of 1970 was last amended in 1990.

Clean Water Act: The Clean Water Act provides for comprehensive federal regulation of all sources of water pollution. It prohibits the discharge of pollutants from non-permitted sources.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): Created in 1980, it is also known unofficially as “Superfund.” CERCLA provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. By creating the designation of “Superfund” sites, CERCLA established provisions for the liability, use, and funding for remediation of hazardous waste sites, particularly when no responsible party could be identified.

Congestion: The level at which transportation system performance and delay is no longer acceptable due to traffic interference. The level of acceptable performance may vary by type of transportation facility, geographic area, and/or time of day.

Context Sensitive Solutions (CSS): CSS is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist. CSS principles include the employment of early, continuous and meaningful involvement of the public and all stakeholders throughout the project development process.

Controlled Access: This is the regulated limitation of access into (ingress) and out of (egress) properties abutting a roadway. A controlled access roadway has few (or no) driveways, may be physically separated by a median, and intersections with crossroads are widely spaced. A freeway would have limited access with access to and from the roadway limited to interchange ramps.

Cross-Section: Depicts the physical dimensions of a roadway facility as seen from a driver’s perspective, including lane, shoulder, median, and typical right-of-way widths.

Cultural Resources: A location, building, structure, or place with potential historic or archaeological significance.

Cumulative Impacts: The impact on the environment which results from the incremental impact of action(s) when added to other past, present, and reasonably foreseeable future actions.

Customs and Border Protection: U.S. Customs and Border Protection (CBP) is the unified border agency within the Department of Homeland Security (DHS). CBP combined the inspection workforces and broad border authorities of U.S. Customs, U.S. Immigration, Animal and Plant Health Inspection Service and the entire U.S. Border Patrol. CBP’s role is to manage, control and protect the Nation’s borders, at and between the official ports of entry. CBP is the lead agency that inspects border crossers and cargo on the United States Plaza at the Blue Water Bridge.

Design Loading: The amount of weight a bridge is designed to hold.

Design Hour Volume (DHV): An hour with traffic volumes that represent a reasonable value for designing the geometric and control element of a facility.

Design Speed: A speed used to design the curvature and grades of a highway, taking into account the composition and volume of traffic. To ensure safe operations, it is typically desirable for engineers to choose a design speed that equals or exceeds the anticipated posted speed, and complements the highway type, setting, functional classification, traffic volume, and terrain.

Direct Impacts: A direct impact is an impact caused by a project that occurs at the same place as the project and at the same time as the project is implemented, i.e. is a direct result of the project.

Diverge: A movement in which a single lane of traffic separates into two lanes without the aid of traffic control devices such as when vehicles exit a freeway.

Draft Environmental Impact Statement (DEIS): See Environmental Impact Statement.

Endangered Species: Endangered Species are any species of animal or plant life that is in danger of extinction throughout all or a significant part of its range. Species can be designated “endangered” by either the U.S. Fish and Wildlife Service or a state’s Natural Heritage program. With this designation comes legal protection at the federal level (Endangered Species Act) and/or the state level. Species can also be designated by state or federal government as Threatened Species or Special Concern Species for species with populations that are somewhat less in jeopardy than endangered species.

Environmental Consequences: The Environmental Consequences discussion in an Environmental Assessment (EA) or Environmental Impact Statement (EIS) assesses the anticipated effects of the proposed project alternatives on all possible resources (air quality, wildlife, wetlands, etc.) that may be affected by the project. This discussion compares and contrasts the impacts associated with all alternatives, including the No-Build Alternative.

Environmental Impact Statement (EIS): An environmental document that is prepared when it is initially determined that the action/project may cause significant impacts to the environment, when environmental studies and early coordination indicate significant impacts, or when review of a previously prepared environmental assessment indicates that the impacts anticipated to result from the project may be significant. A Draft EIS (DEIS) compares all reasonable alternatives to the proposed project and summarizes the studies, reviews, consultations, and coordination required by legislation and Executive Orders to the extent appropriate at the draft stage in the environmental process. A Final EIS (FEIS) identifies and addresses the social, economic, and environmental impacts of a Recommended Alternative and addresses public comments received during the formal public commenting period as well as the

public comments received throughout the NEPA process. After publishing the Draft and Final EIS, the NEPA process concludes with a Record of Decision (ROD).

Facility: Any type of transportation infrastructure such as highways, local roads, transit centers, etc. that is used to move people and goods.

Family Independence Agency (FIA): The FIA is Michigan's public assistance, child and family welfare agency directing the operations of public assistance and service programs through a network of over 100 county family independence agencies in every county in Michigan.

Farmland Protection Policy Act (FPPA): The purpose of FPPA is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. FPPA ensures, to the maximum extent practicable, that federal programs are administered in a manner that is compatible with state, unit of local government, and private programs to protect farmland.

Farmland and Open Space Preservation Program: This program enables a farm owner to enter into a development rights agreement with the state, ensuring that the land remains in an agricultural use for a minimum of ten years and that the land is not developed in a non-agricultural use.

Farmlands of Local Importance: The Natural Resources Conservation Service defines these farmlands as "those lands that are nearly Prime Farmland and that economically produce high yields when treated and managed according to modern farming methods. Some may produce as high a yield as prime farmlands, if conditions are favorable".

Federal Highway Administration (FHWA): Division of the U.S. Department of Transportation which funds highway planning and construction programs and is headquartered in Washington, D.C., with field offices located across the United States. The FHWA provides expertise, resources, and information to continually improve the quality of our nation's highway system and its intermodal connections. The Federal-Aid Highway Program is the main program through which the FHWA performs its mission. The Federal-Aid Highway Program provides federal financial assistance to the States to construct and improve the National Highway System, urban and rural roads, and bridges.

Final Environmental Impact Statement (FEIS): See Environmental Impact Statement.

Floodplain: Any land area susceptible to being inundated by floodwaters from any source.

Food and Drug Administration (FDA): The FDA is one of several federal agencies that work cooperatively with Customs and Border Protection to determine if foreign goods should enter into the United States. FDA reviews imported entries of foods, drugs, medical devices, biologics, cosmetics, as well as a number of other products that fall under FDA jurisdiction.

FDA helps to assure that imported food products are safe and wholesome, drugs and devices are safe and effective and that all other imported FDA regulated products meet the laws and requirements of the United States.

Free and Secure Trade Program (FAST): This program partners the United States and Canadian governments with the private sector to ensure a secure supply chain for low risk goods. FAST offers expedited clearance to those carriers, drivers, and importers who have registered and are pre-authorized. For low risk goods being imported from Canada into the U.S. by a pre-authorized importer, a pre-authorized carrier, and a registered driver, the carrier provides Customs and Border Protection (CBP) with an electronic transmission of limited data in advance of the arrival of the shipment at the border. When the shipment arrives at the border, it is processed through dedicated lanes where the driver will present his registration card and the CBP officer uses a bar code or transponder to identify the shipment. FAST opened at the Blue Water Bridge in December 2002.

Freeway: A divided highway for through traffic with controlled access. All crossings of the freeway by other roadways are vertically grade-separated (i.e. bridges carry the freeway above the other roadway or vice versa) and all access to the roadway is provided exclusively by interchange ramps that merge with the freeway traffic.

General Services Administration (GSA): The General Services Administration (GSA) is a federal agency created by Congress to improve government efficiency and effectiveness. GSA provides office space, courthouses, warehouses, laboratories, and border stations, and provides the protection services necessary to make these facilities secure.

Gore Area: The sharply-angled area located immediately between the left edge of a ramp pavement and the right edge of the roadway pavement at a merge or diverge area.

Non-Intrusive Inspection (NII): NII is an imaging system used to non-intrusively inspect freight contained on and in trucks, cargo containers, and passenger vehicles. NII allows operators to view images on a video monitor to quickly and efficiently identify voids, false walls or ceilings, and other secret compartments typically associated with the transportation of drugs, explosives and weapons.

Habitat: An area that provides an animal or plant with adequate food, water, shelter, and living space.

Hazardous Materials: Substances or materials capable of posing unreasonable risk to health, safety and property when transported in commerce, or when encountered in underground contamination.

Historic Resources: Historic resources are properties that may possess potential historic significance based on its age, type, or its association with a person(s) or event(s). Such a

property may have the distinctive characteristics of a type, period, or method of construction or may represent the works of a master or may possess high artistic values.

Hydraulic Influence: The hydraulic influence is the area that has a change in water levels because of a structure blocking the normal river flow.

Hydric Soils: A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to favor the growth of wetland plants.

Illustrative Alternatives: Preliminary concepts developed at the onset of a transportation planning project. Illustrative Alternatives are typically very conceptual by nature and are intended to examine all reasonable alternatives to address the transportation needs of the study area, prior to detailed study to identify their feasibility.

Impacts: Effects which occur as a result of implementing a transportation improvement. Direct impacts most commonly occur when proposed right-of-way actually crosses a resource in question such as a residence, business, wetland, or other regulated resources. Impacts can also be indirect impacts and can be part of a cumulative impact.

Indirect Impacts: Indirect impacts are caused by the project and are later in time or farther removed in distance than direct impacts, but are still “reasonably foreseeable.”

Infrastructure: Term used to describe the physical assets of a society or community including roads, bridges, transit facilities, bikeways, sidewalks, parks, sewer/water systems, communications networks, and other capital facilities.

Invasive Species: Invasive species are non-native plants or animals that are introduced far from their original range, and become more successful at competing with native species for space and resources.

Land Evaluation Site Assessment (LESA): LESA is a point-based approach for rating the relative importance of agricultural land based upon specific measurable features.

Land Use: The way specific portions of land or the structures on them are used or planned for future use. Land use is typically based on local zoning guidelines and long term land use plans. Example land uses include commercial, residential, industrial, retail, agricultural, vacant, etc.

Limited Access Facility: A freeway facility that does not have driveway access or roadway intersections. Access is limited to freeway interchanges.

Median: A barrier, often found on multi-lane roadways or freeways, which provides separation distance between opposing traffic movements. A median can consist of either a grass or natural setting typical of a rural cross-section, or a concrete wall or guardrail barrier which is typical of an urban setting.

Merge: A movement in which two separate lanes of traffic combine to form a single lane without the aid of traffic signals or other right-of-way controls. An example of a merge is traffic merging or entering onto a freeway from an on-ramp.

Michigan Department of Environmental Quality (MDEQ): The state agency responsible for review of any wetland, floodplain, potentially contaminated sites, air quality, and/or water quality impacts.

Michigan Department of Natural Resources (MDNR): The state agency responsible for review of state threatened and endangered species, parkland, and fisheries impacts.

Michigan Department of Transportation (MDOT): The state agency responsible for planning, construction, and maintenance of all interstate, U.S., and state highways, bridges, and other modes of transportation within the State of Michigan.

Mitigation: Actions provided to avoid, minimize, or compensate the negative effects of a project.

Mobile Source Air Toxics (MSAT): Regulated by the EPA, MSATs are known as “hazardous air pollutants.” Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

National Ambient Air Quality Standards (NAAQS): Air quality standards set by the U.S. Environmental Protection Agency for pollutants considered harmful to public health and the environment.

National Environmental Policy Act (NEPA): Federal act passed in 1969 which requires the assessment of the social, economic and environmental impacts that a federally funded or federally permitted project might cause. This includes the identification of the purpose of and need for the project and evaluation of alternatives to minimize resulting impacts.

National Pollution Discharge Elimination System (NPDES): The national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of Clean Water Act.

National Register of Historic Places (NRHP): The NHRP is the nation's official list of cultural resources worthy of preservation. This list was established under the National Historic Preservation Act of 1966 and is administered by the Department of the Interior.

Natural Resources Conservation Service (NRCS): The federal agency responsible for providing leadership in a partnership effort to help people conserve, maintain, and improve our

natural resources and environment. NRCS was formerly known as the Soil Conservation Service.

Network: A transportation system with its many roadways and routes often showed either graphically or mathematically.

NEXUS: NEXUS is a joint program that has been implemented with the cooperation of the American and Canadian governments and is now being expanded nationally. Participants in the NEXUS program are approved by both the U.S. and Canada as low-risk, pre-approved travelers, enjoying a simplified entry process while traveling back and forth across the U.S./Canada border. NEXUS pass holders use dedicated lanes at border crossings, and are not regularly subjected to the usual customs and immigration questioning. These lanes are provided in an effort to reduce traffic congestion and delays at bridge and land crossings while maintaining a safe and secure border.

Non-Attainment Area: A designation by the Environmental Protection Agency of any area in the United States failing to meet the National Ambient Air Quality Standards (NAAQS).

Non-Motorized Transportation: Bicycles, roller blades, running, walking, wheelchairs, scooters, sled dogs, etc.

North American Free Trade Agreement (NAFTA): A pact that calls for the gradual removal of tariffs and other trade barriers on most goods produced and sold in North America. NAFTA became effective in Canada, Mexico, and the United States January 1, 1994. NAFTA forms the world's second largest free-trade zone, bringing together 365 million consumers in Canada, Mexico, and the United States in an open market.

Peak Hour: The 60-minute period in the AM or PM in which the largest volume of travel is generally experienced on a roadway segment (e.g. rush hour).

Port: A United States port of call is designated to accept and release entries of merchandise, collect duties and enforce the various provisions of Customs laws. The Blue Water Bridge Plaza is officially a port of entry.

Practical Alternative: Practical Alternatives are developed from refinements made to the initial Illustrative Alternatives. These alternatives are subject to increased levels of traffic, engineering, social, economic, and environmental analysis as well as public and agency comment to determine if they are capable of meeting the purpose and defined goals of the project.

Preferred Alternative: The Preferred Alternative is selected from the Practical Alternatives after extensive engineering, social, economic, and environmental analysis. It could include components of several Practical Alternatives in any combination found to be the most beneficial.

Primary Inspection: The first point of contact or set of inspection booths at a border station for both trucks and cars is called Primary Inspection. If all of a truck's paperwork is in order and was processed ahead of time, the truck is a "Line Release" truck and this may be its only stop. If the paperwork is not in order, the carrier must visit a broker, or if the carrier is selected for examination, the truck will be directed to Secondary Inspection. As individuals enter the U.S. or Canada they will be stopped and questioned prior to entry into that country at Primary Inspection. Each person in the vehicle must be able to prove their citizenship. Individuals requiring further questioning or processing will be sent to Secondary Inspection.

Prime Farmland: The Natural Resources Conservation Service has designated prime farmland as "land that has the best combination of physical and chemical characteristics for producing food, forage, fiber, and oilseed crops. The land could be crop, pasture, range, forest, or other uses, but does not include urban built-up land or water bodies since these two are considered irreversible uses. It has the soil quality, growing season, and moisture supply needed to economically produce and sustain high yields when treated and managed according to modern farming methods, including water management" (USDA, 1983).

Public Hearing: A hearing formally advertised and convened to allow any person who deems their interest to be affected by a project an opportunity to be heard. A public hearing includes formal documentation of all comments received.

Recognized Environmental Conditions (RECs): The presence of or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products.

Recommended Alternative: Is the alternative that has been identified as best meeting the purpose and need for the project while minimizing social, environmental and economic impacts.

Record of Decision (ROD): A final environmental document published after a Final Environmental Impact Statement (FEIS) that identifies the selected alternative. A ROD discusses the alternatives considered and the basis of the decision as well as any mitigation measures for environmental impacts.

Resource Conservation and Recovery Act (RCRA): Passed by Congress in 1976 to provide cradle-to-grave management of hazardous waste. Regulation is enforced by the U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environmental Protection (DEP).

Right-of-Way (ROW): Public land reserved for locating infrastructure such as a roadway or a utility line. A road right-of-way includes area for any required shoulders, drainage ditches, curb, median, barriers, and fences in addition to the roadway.

Secondary Inspection: The separate locations for additional processing and inspection of commercial vehicles or individuals by Customs and Border Protection after Primary Inspection.

Section 4(f): This is Section 4(f) of the Department of Transportation Act of 1966 as amended. Section 4(f) states that no highway project should be approved which requires the “use” of any publicly owned land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent alternative to the use of such land. In addition, adverse impacts to these 4(f) sites must include all possible planning to minimize harm resulting from such use. In the context of Section 4(f), “use” can be either a direct impact (taking of property), or a “constructive use”, which may not actually require acquisition of land, but otherwise impairs the function of the resource through changes in access or surroundings.

Section 106: Section 106 of the National Historic Preservation Act of 1966 is the main protection that archaeological, historical, and cultural resource sites have against the encroachment of federally-funded programs in the United States. Section 106 requires that the State Historic Preservation Office (SHPO) review all federal actions for any potentially adverse effect on cultural resources.

Sole Source Aquifers: Aquifer that supplies 50 percent or more of the drinking water in a given area.

Superelevation: The slope to which a roadway is banked between the inner-most lane and the outer-most lane. On freeways and other high-speed facilities, curved segments are often superelevated so traffic can safely travel through the curve at higher speeds.

State Historic Preservation Officer (SHPO): The state agency having jurisdiction over protecting archaeological and aboveground historic architectural resources (e.g. cultural resources).

Stopping Sight Distance: Stopping sight distance is the sum of two distances: (1) the distance traversed by a vehicle from the instant the driver sights a reason for stopping until the instant the brakes are applied; and (2) the distance needed to stop the vehicle from the instant brake application begins. These are referred to as brake reaction distance and braking distance, respectively.

Technical Memorandum: Reports detailing the processes and descriptions of various analyses such as Traffic, Air and Noise, Wetland Delineation, and others which were used to prepare a Draft and/or Final Environmental Impact Statement.

Temporary Impact: Refers to impacts occurring during construction that cease to exist after construction associated with the project is completed (e.g. dust associated with construction activities).

Threatened Species: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Traffic Count: Mechanical, digital, or photographic means of counting the number and type of vehicles passing a given location.

Transit: Transportation mode involving buses, trains, and other vehicles that individually move larger numbers of people than do individual automobiles. Also known as mass transit, public transit, public transportation, or urban transit.

Transboundary Effects: Project effects that extend across the border and affect another country's environment.

Transportation System Management (TSM): An Alternative that includes reasonable small-scale roadway improvements such as traffic signal improvements, turn restrictions, turn lanes, and short distance local road improvements. TSM does not include major construction.

Travel Demand: The counted or projected volume of traffic that is or will be utilizing a roadway in a specified time period (i.e., 24-hours, peak periods, etc.).

Travel Forecasting: The process by which demographic information (population and employment) and land use projections are used to determine potential future vehicle trips on a given transportation network.

Under Clearance: The vertical distance from the surface of a roadway to the bottom of a bridge deck crossing over that roadway.

Underground Storage Tank Site (UST): Sites containing one or more underground storage tanks (USTs) or those found to show evidence of an existing or removed tank during background research or site visits. Depending on the type, age, and condition of the UST and associated underground piping, sites of this type may present a risk for soil and/or groundwater contamination. If the UST is documented as leaking or shows visible signs of leakage at ground level, it is referred to as a Leaking Underground Storage Tank (LUST).

Unique Farmlands: The Natural Resources Conservation Service has defined unique farmlands as "land other than prime farmland that is used for the production of specific high value food and fiber crops. These lands have a special combination of factors needed to economically produce sustained high quality yields of a specific crop when treated and managed according to modern farm methods. The special factors that make the land unique include soil quality, growing season, temperature, humidity, elevation, moisture supply, or other conditions such as nearness to market that favor growth of a specific crop. Moisture supply is in the form of stored moisture, precipitation, or a developed irrigation system."

United States Army Corps of Engineers (USACE): The federal agency responsible for review of all water crossings of navigable streams. The USACE also serves in an advisory role on wetland impacts of Michigan highway projects.

United States Department of Agriculture (USDA): The federal agency responsible for review of any prime and unique farmland impacts.

United States Environmental Protection Agency (EPA): A federal agency that is charged with protecting the natural resources of the country.

United States Fish and Wildlife Service (USFWS): The federal agency responsible for review of the impacts on any federally listed threatened and endangered species along with other game and non-game species. The USFWS also serves as an advisory agency for many other environmental issues including wetland and habitat impacts.

Upland: An area that is not classified as a wetland.

Urban Cross-Section: A roadway facility characterized by enclosed drainage, meaning that stormwater is conveyed away from the paved roadway using curbs, gutters, catch-basins and storm sewers. (The opposite is a Rural Cross-Section, where water is conveyed away from the roadway using swales, slopes, etc.) Urban divided freeway cross-sections have a median barrier wall separating opposing lanes of traffic.

Weaving: The crossing of two or more traffic streams traveling in the same direction along a length of a highway, without the aid of traffic control devices except for guide signs. An example of a weave would be a freeway where an on-ramp is closely followed by an off-ramp. Traffic wishing to exit the freeway needs to travel from the right lane to the off-ramp. In the same area, traffic wishing to enter the freeway needs to travel from the on-ramp to the right travel lane. The segment of roadway where both streams of traffic conflict with each other is a weave.

Wetland: Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support plants typically adapted for life in saturated soil conditions. The term “wetland” encompasses many different types of plant communities, and is dependent on the duration and depth of inundation. These different types can include fens, bogs, wet meadows, wooded wetlands, scrub-shrub wetlands, open water wetlands, etc. A “wetland complex” describes a contiguous area composed of more than one type of wetland. An area that is not classified as a wetland is called “upland.”

Wetland Delineation: The process used to determine the jurisdictional boundaries of a wetland. Wetland delineations are a function of the soils, hydrology and vegetation observed.

Wetland Mitigation: Avoidance, minimization, and compensation for the loss of functional values associated with wetlands impacted by an activity. The most common types of

compensation include wetland restoration (reestablishing some or all of the values associated with wetland where wetlands have been drained), and wetland creation (establishing new wetland in an upland or drained area).

CHAPTER 11

LIST OF ACRONYMS

Acronym	Meaning
AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
APE	Area of Potential Effect
AQCR	Air Quality Control Region
AQI	Air Quality Index
AST	Above Ground Storage Tanks
ASTM	American Society for Testing and Materials
BEA	Baseline Environmental Assessment
BMP	Best Management Practices
BWBC	Blue Water Bridge Canada
CAAA	Clean Air Act Amendments
CBP	Customs and Border Protection
CBSA	Canada Border Services Agency
CCRA	Canada Customs and Revenue Agency
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability
CO	Carbon Monoxide
CORRACTS	Corrective Action Facilities

Acronym	Meaning
CSS	Context Sensitive Solutions
CVPC	Commercial Vehicle Processing Center
DEIS	Draft Environmental Impact Statement
DHV	Design Hour Volume
EA	Environmental Assessment
EIS	Environmental Impact Statement
EM	Emergent Wetland
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
FAST	Free and Secure Trade
FDA	Food and Drug Administration
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIA	Family Independence Agency
FIRM	Flood Insurance Rate Maps
FO	Forested Wetland
FONSI	Finding of No Significant Impacts
FPPA	Farmland Protection Policy Act
FQI	Floristic Quality Index

Acronym	Meaning
GIS	Geographic Information System
GSA	General Services Administration
HCS	Highway Capacity Software
INS	Immigration and Naturalization Services
KLD	KLD Associates, Inc.
LESA	Land Evaluation Site Assessment
LOS	Level of Service
LQG	Large Quantity Generator
LRP	Long Range Plan
LUST	Leaking Underground Storage Tank
LWCF	Land and Water Conservation Fund Act
MDA	Michigan Department of Agriculture
MDCH	Michigan Department of Community Health
MDEQ	Michigan Department of Environmental Quality
MDEQ-RRD	Michigan Department of Environmental Quality-Remediation and Redevelopment Division
MDNR	Michigan Department of Natural Resources
MDOT	Michigan Department of Transportation
MOE	Measure of Effectiveness
MOT	Maintenance of Traffic
MPO	Metropolitan Planning Organization

Acronym	Meaning
MSAT	Mobile Source Air Toxics
MSE	Mechanically Stabilized Earth
NAAQS	National Ambient Air Quality Standards
NAFTA	North American Free Trade Agreement
NEPA	National Environmental Policy Act
NFRAP	No Further Remedial Action Planned
NII	Non-Intrusive Inspection
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resource Conservation Service
NREPA	Natural Resources Environmental Protection Act
NRHP	National Register of Historic Places
O ₃	Ozone
OW	Open Water Wetland
PA	Practical Alternative
Pb	Lead
PEM	Project Enhancement and Mitigation
PM	Particulate Matter
PPB	Parts per Billion

Acronym	Meaning
PPM	Parts per Million
PSI	Pollutant Standards Index
PSP	Public/Semi-Private
RCRA	Resource Conservation and Recovery Act
RCRIS	Federal Resource Conservation and Recovery Information System
REC	Recognized Environmental Condition
ROW	Right-of-Way
SB	Sear Brown, Inc.
SCCOTS	St. Clair County Transportation Study
SEMCOG	Southeast Michigan Council of Governments
SHPO	State Historic Preservation Office
SME	Soils and Materials Engineers, Inc.
SO ₂	Sulfur Dioxide
SQG	Small Quantity Generator
SS	Scrub/Shrub Wetland
TA	Technical Advisory
TIP	Transportation Improvement Program
TSD	Treatment Storage and Disposal
TSM	Transportation System Management
USACE	United States Army Corps of Engineers

Acronym	Meaning
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
US	United States
VAU	Visual Assessment Units
WCR	Wetland and Coastal Resources, Inc.
WHMD	Waste and Hazardous Materials Division

CHAPTER 12

CORRECTIONS TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

The following corrections were noted in the Draft Environmental Impact Statement:

- Page 9-3, Townships, Kimble Township changed to Kimball Township.
- Appendix E Figures E.3 – E.14 and E.18 - E.19 legend boxes have been revised and expanded as needed for print in the FEIS to show all the graphic symbols and colors depicted in the figures.
- Page 3.13-2 4th paragraph, last sentence has been revised to read: Wildlife species that would be affected are common in the surrounding area, tolerant of noise and visual disturbances, and may relocate to similar adjacent habitats.
- Page 5.14 1st paragraph, last sentence has been revised to read: If evidence of migratory bird nesting is discovered, coordination between MDOT (Environmental Section and Region Resource Specialist), MDEQ, The U.S Army Corps of Engineers, U.S. Coast Guard and U.S. Fish and Wildlife Service will occur.
- Page 3.11-1 1st paragraph has been revised to read: The floodplain is divided into two parts, the floodway which carries most of the flow during a flood event, and the floodway fringe which is an area of very slow moving water or “slack water”. The floodway is the high hazard area during times of flooding.
- Figure E.16 has not been updated, as it is not included in the FEIS.
- Page E-19 Wetlands of the DEIS stated that replacement ratios for forested impacts are 10:1, and the ratios for emergent, scrub/shrub and open water are 2:1. This was incorrect the correct replacement ratios are 2:1 for forested wetlands and 1.5:1 for emergent scrub/shrub wetlands
- Page 2.2-31 2nd paragraph stated that traffic may either turn on Pine Grove Avenue going right to northern destinations or left to access downtown Port Huron. This was incorrect and revised to read: traffic may either turn on Pine Grove Avenue going left to northern destinations or right to access downtown Port Huron
- The Summary of Impacts Matrix located at the end of the Executive Summary listed CBP plaza space for the City West Alternative as 65 acres. The 65 acres listed actually reflects the entire plaza not just CBP plaza space.
- In Figure E.22 the location of River District Hospital is shown on River Road in Port Huron Township. This is incorrect; River District Hospital is located on River Road in East China, Michigan.
- On page 3.2-19 the Preferred Alternative states 137 residents and 37 businesses would be displaced. These numbers are incorrect the correct relocation numbers for the City West Alternative is 129 residential and 30 businesses.
- On page 3.2 - 20 paragraph 3 the DEIS states that the City West Alternative would have 37 businesses displaced. This is incorrect; the correct number of business displacements is 30.
- On page E-2, it was incorrectly stated that the overall project study limits encompass approximately 195 acres. It should have state 923 acres.

- Figures 3.13.1 and 3.13.2 –the figures are confusing in that part of the wetlands are shown in yellow and part are in blue along Stocks Creek. The error has been noted; however the figure has not been updated, as it is not included in the FEIS.
- Page 3.13-6- Figures 3.13.1 and 3.13.2-The figures are confusing in that part of the wetlands are shown in yellow and part are in blue along Stocks Creek. The error has been noted in Chapter 12 of the FEIS however the figure has not been updated as it has not been included in the FEIS.
- On page E-25 (Figure E.16), the symbols that correlated to the legend appear to change in size. This figure has not been included in the FEIS. The error has been noted in Chapter 12 of the FEIS however the figure has not been updated as it has not been included in the FEIS.
- On page 3-47 it states, "Wildlife species that would be affected are common in the surrounding area, tolerant of noise and visual disturbances, and would easily relocate to similar habitats." The statement has been revised to read: "... and may relocate to similar adjacent habitat."
- Page E-19 Wetlands states that replacement ratios for forested impacts are 10:1, and the ratios for emergent, scrub/shrub and open water are 2:1. Under Part 303; the replacement ratios are 2:1 for forested wetlands and 1.5:1 for emergent scrub/shrub wetlands. The correction has been made in the DEIS.

- AAA of Michigan. 1955. Map of Port Huron.
- Adamus, P.R., E.J. Clairain, R.D. Smith, and R.E. Young. 1987. Wetland Evaluation Technique (WET). Volume II: Methodology. Vicksburg, Mississippi. U.S. Department of the Army, Waterways Experiment Station.
- Adamus, P.R., L.T. Stockwell, E.J. Clairain, M.E. Morrow, L.D. Rozas, and R.D. Smith. 1991. Wetland Evaluation Technique (WET). Volume I: Literature review and evaluation rationale. Technical Report WRP-DE-2. Vicksburg, Mississippi. U.S. Department of the Army, Waterways Experiment Station.
- American Association of State Highway Transportation Officials. 2007. Transportation Invest In Our Future America's Freight Challenge.
- Anderson, Jim, and Dwayne Anderson. 1983. Unseen Wonder of the World: The St. Clair Railroad Tunnel, Vol. 19. No. 2.
- Andreas, A.T. & Co. 1883. History of St. Clair County, Michigan. Chicago, IL. Andreas, A.T. & Co.
- Banker, Levi. 2003. Olde Town Historic Neighborhood, Inc. Port Huron, MI.
www.oldetownporthuron.com/oldetown.htm.
- Barondess, Margaret M. 1997. "A Tale of Two Bridges Spanning Blue Waters." Michigan History Magazine. Vol. 81. No. 4.
- Bartoldus, C.C., E.W. Garbisch, and M.L. Kraus. 1994. Evaluation for Planned Wetlands (EPW). St. Michaels, Maryland. Environmental Concern In.
- Blue Water Bridge Authority. 2003. Canadian Plaza Master Plan Final Report Draft.
- Bodley, William. 1988. "The First Fort at Le Detroit." Michigan History. Vol. 72. No. 6.
- Brennan, James. 2003. E.C. Williams House. Michigan Historical Markers.
<http://www.michmarkers.com/Frameset.htm>.
- Carman, S.M. 2001. Special animal abstract for *Obovaria subrotunda* (Round Hickorynut). Lansing, MI. Michigan Natural Features Inventory.

- Chaput, Donald, ed. 1962. Michigan History. Michigan Historical Commission.
- Charter Township of Port Huron. 2003 Zoning Ordinance.
- City of Port Huron. 2001. Parks and Recreation Plan.
- City of Port Huron. 2003. Comprehensive Plan Summary.
- Economic Development Alliance of St. Clair County. 2004. St. Clair County Bottom Line – Area Profile.
- ESRI Citation – (Environmental Systems Research Institute, Inc.). Redlands, CA.
- Federal Highway Administration. 1983. I-94 Blue Water Bridge and Plaza, St. Clair County. Draft Environmental Impact and Section 4(f) Statement.
- Federal Highway Administration. 1983. I-94 Blue Water Bridge and Plaza, St. Clair County. Final Environmental Impact and Section 4(f) Statement.
- Federal Highway Administration. 2001. Manual for Air Quality Considerations in Environmental Documents. Southern Resource Center.
- Federal Highway Administration. 2005. FHWA Section 4(f) Policy Paper.
- Fort Gratiot Township. 1999. Comprehensive Master Plan for Fort Gratiot Township, Michigan 1999-2020.
- Gleason, H.A., and Cronquist, A. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Bronx, NY. The New York Botanical Garden. Second Ed.
- Gordon, S.C. 1992. How to Complete the Ohio Historic Inventory. Columbus, Ohio. Ohio Historical Society, Inc.
- Harding, J.H., and J.A. Holnam. 1990. Michigan Turtles and Lizards. East Lansing, Michigan. Cooperative Extension Service, Michigan State University.
- Harris, Cyril M. 1998. American Architecture an Illustrated Encyclopedia. New York. W.W. Norton & Company.
- Herman, K.D., L.A. Masters, M.R. Penskar, A.A. Reznicek, G.S. Wilhelm, and W.W. Brodowicz. 1996. Floristic quality assessment with wetland categories and computer application programs for the State of Michigan. Lansing, MI. Michigan Department of Natural Resources, Wildlife Bureau, Natural Heritage Program.

- Holmgren, N.H. 1998. Illustrated Companion to Gleason and Cronquist's Manual. Bronx, NY. The New York Botanical Garden.
- Kenn, John M. 1975. "The Saint Clair River Railroad Tunnel." Vermilion, OH. Inland Seas: Quarterly Journal of the Great Lakes Historical Society 31(3). Great Lakes Historical Society.
- Kimball Township. 1995. Kimball Township Master Plan.
- Klein, Marilyn W., and David P. Fogle. 1986. Washington D.C. Clues to American Architecture. Starhill Press.
- Lau, Michael C., Cynthia S., Y. Lee, Gregg G., Judith L. Roach, Eric R. Boeker, and Gregg C. Fleming. 2004. FHWA Traffic Noise Model Users Guide (Version 2.5 Addendum). Federal Highway Administration.
- Lee, Y. 2000. Special animal abstract for *Clemmys guttatas* (spotted turtle). Lansing, MI. Michigan Natural Features Inventory.
- Library of Congress. 2003. American Memory: Historical Collections for the National Digital Library. <http://www.memory.loc.gov/ammem/>.
- McAlester, Virginia and Lee. 1993. A Field Guide to American Houses. New York: Knopf.
- Merritt, R., and K. Cummins. 1996. Aquatic Insects of North America. Dubuque, Iowa. Kendall/Hunt Publishing Co. pp 862.
- Michigan's 2003 Annual Air Quality Report, Appendix A, Criteria Pollutant Summary for 2003, 1-hr 2nd highest in Oakland Park, Oakland County, Air Quality Division, Lansing, MI , October 2004
- Michigan Department of Environmental Quality (MDEQ). 2002. Qualitative Biological and Habitat Survey Protocols for Wadable Streams and Rivers. GLEAS Procedure Number 51 with 2002 revisions. Lansing, Michigan. Michigan Department of Environmental Quality, Surface Water Quality Division.
- Michigan Department of Environmental Quality. 2001. MDEQ Wetland Identification Manual: A technical manual for identifying wetlands in Michigan. EQ2787.
- Michigan Department of Transportation. 1999. Final Report Blue Water Bridge and Toll Plaza Operations Study.
- Michigan Department of Transportation. 2003. Commission Policy 10136, Noise Abatement.

- Michigan Department of Transportation / Federal Highway Administration in Cooperation with the U.S. Coast Guard, Blue Water Bridge Authority. 1994. Environmental Report (and Re-Evaluation of 1983 Environmental Impact Statement). Blue Water Bridge Additional Capacity Project.
- Michigan Department of Transportation. 2007. State Long-Range Transportation Plan 2005-2030 Economic Impact Analysis.
- Michigan Department of Transportation. 2007. State Long-Range Transportation Plan 2005-2030 Freight Profile Technical Report.
- Ministry of Transportation, Ontario. 2001. Ontario-Michigan Border Crossing Traffic Study, Summary Report.
- Ministry of Transportation, Ontario. 2001. Ontario-Michigan Border Crossing Traffic Study, Technical Report.
- Mitts, Dorothy Marie. 1968. That Noble Country: The Romance of the St. Clair River Region. Philadelphia. Dorrance & Company.
- National Park Service. 2002. National Register Information System located online at <http://www.cr.nps.gov/nr/>.
- Parsons Brinckerhoff Quade & Douglas, Inc. 2002. Truck Freight Crossing the Canada-U.S. Border. An Analysis of the Cross-Border Component of the 1999 Canadian National Roadside Study.
- Ontario Ministry of Finance. 2005. Towards 2025: Ontario's Long-Term Outlook.
- Orzag, Peter. R. Director of the Congressional Budget Office. 2007. The Budget and Economic Outlook: Fiscal Years 2008 to 2017, Testimony before the Committee on the Budget, U.S. House of Representatives.
- Port Huron City Engineer's Office. 1929. Map of Port Huron.
- Rand McNally Corporation. 1895. The New 11 x 14 Atlas of the World. 2002. Online at <http://www.livgenmi.com/1895ky.htm>.
- Sanborn Map Company.
1887. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1892. Insurance Maps of Port Huron, Michigan. Broadway, New York.

1897. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1898. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1903. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1911. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1916. Insurance Maps of Port Huron, Michigan. Broadway, New York.
1950. Insurance Maps of Port Huron, Michigan. Broadway, New York.
- Scott, W.B., and E.J. Crossman. 1979. Freshwater Fishes of Canada. Fisheries Research Board of Canada, Ottawa 1973. Bulletin 184.
- Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. 1993.
- Southeast Michigan Council of Governments. 2003. Employment Change by Community, Southeast Michigan, 1999-2002.
- St. Clair County Metropolitan Planning Commission. 2004. St. Clair 2030 Long Range Transportation Plan.
- St. Clair County Metropolitan Planning Commission. 2002. Kimball Township Zoning Ordinance # 142.
- St. Clair County Metropolitan Planning Commission. 2000. St. Clair County Master Plan Summary. Endorsed by: St. Clair County Board of Commissioners.
- Stamps, Richard, and Nancy Wright. 1986. "Thomas Edison's Boyhood Years: A Puzzle". Michigan History. Vol. 70. No. 3. pp 36-43.
- Tappan, Judge Harvey. 1910. Pioneer History of St. Clair County-Taken from Public Records. St. Clair County Pioneer Society. Algonac, MI.
- Taylor, Dr. John C., Dr. Douglas Robideaux, and Dr. George C. Jackson. 2003. The U.S.-Canada Border: Cost Impacts, and Short to Long Term Management Options.
- United States Department of Agriculture. 1974. Soil Survey of St. Clair County, Michigan.

- United States Department of Agriculture, Natural Resources Conservation Service. 1998. Field Indicators of Hydric Soils in the United States. Version 4.0. G.W. Hurt, P.M. White, and R.F. Pringle. (eds.). USDA, NRCS, Fort Worth, Texas.
- United States Department of Transportation Bureau of Transportation Statistics. 2001. North American Trade and Travel Trends.
- United States Department of Transportation Bureau of Transportation Statistics. 2007. TransBorder Freight Database. Online at:
<http://www.bts.gov/programs/international/transborder/tbdr/>
- United States Environmental Protection Agency. 1992. Guidelines for Modeling Carbon Monoxide from Roadway Intersections, Office of Air Quality Planning and Standards, Technical Support Division, Research Triangle Park, North Carolina.
- United States Environmental Protection Agency. 1995. User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections, Office of Air Quality Planning and Standards, Research Triangle Park, NC.
- United States Environmental Protection Agency. 2003. User's Guide to MOBILE6.1 and MOBILE6.2, Mobile Source Emission Factor Model. Assessment and Standards Division, Office of Transportation and Air Quality, Ann Arbor, Michigan.
- United States General Services Administration. Land Port of Entry Design Guide Supplement. 2005.
- United States Geological Survey. 1952. Port Huron, Michigan Quadrangle. Washington, D.C.: Department of the Interior.
- University of Virginia Geospatial and Statistical Data Center. 1998. United States Historical Census Data Browser. University of Virginia. 2003. <http://fisher.lib.virginia.edu/census/>.
- Voss, E.G. 1972. Michigan Flora. Part I. Gymnosperms and monocots. Bull. Cranbrook Institute of Science Bulletin 55 and University of Michigan Herbarium, MI.
- Voss, E.G. 1985. Michigan Flora. Part II. Dicots (Sauraceae – Cornaceae). Bull. Cranbrook Institute of Science Bulletin 55 and University of Michigan Herbarium, MI.
- Voss, E.G. 1996. Michigan Flora. Part III. Dicots (Primulaceae – Asteraceae). Bull. Cranbrook Institute of Science Bulletin 55 and University of Michigan Herbarium, MI.
- Washington State Department of Transportation. 2005. Reader-Friendly Document Tool Kit.

- Weir, Donald J., John R. Kern, William E. Rutter, C. Stephan Demeter, and Richard Neuman. 1983. Preliminary Historic and Archaeological Resource Survey for the I-94 Blue Water Bridge Plaza Revision, Port Huron, MI. Submitted by Commonwealth Associates, Inc. Jackson, MI.
- Western Historical Company. 1883. History of St. Clair County, Michigan. Chicago: A.T. Andreas & Company.
- Wikipedia, The Free Encyclopedia. 2003. Port Huron, Michigan.
http://www.wikipedia.org/W:K:/Port_Huron,_Michigan.
- Writers' Program. 1941. Michigan: A Guide to the Wolverine State. Oxford University Press. New York, NY.
- Wyatt, B. 1986. Cultural Resource Management in Wisconsin: Volume II. Historic Preservation Division, State Historical Society of Wisconsin, Madison.

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Michigan Department of Transportation
Real Estate Division
Conceptual Stage Relocation Plan
Blue Water Bridge Plaza
Job # 100136

GENERAL AREA AND PROJECT INFORMATION

The purpose of the Blue Water Bridge Plaza project for the foreseeable future is to provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Port Huron area and to support the economies of Michigan, Ontario, Canada and the United States. As well as support the mobility and security associated with the needs of national and civil defense.

This is a supplement to the Conceptual Relocation Plan dated November 28, 2007. The purpose of this supplement is to address any changes that have occurred since the completion of the original plan including the approval of the Preferred Alternative for this project.

The general area of the proposed project consists of a mixture of residential, commercial, non-profit and vacant properties. This is the Recommended Alternative.

DISPLACEMENTS

Recommended Alternative	125 Residential
	30 Commercial
	1 Non-Profit Organization

DISPLACEMENT EFFECTS AND ANALYSIS

Acquisition of property for this project will allow for an orderly and timely relocation of all eligible displaced residents, businesses, and nonprofit organizations. The acquiring agency will ensure the availability of a sufficient number of replacement properties in the area for all eligible displacees.

Residential: The project may cause the displacement of approximately 125 residential properties. A study of the St. Clair County housing market indicates a sufficient number of replacement homes and rentals will be available throughout the process. It is anticipated that the area residential real estate market will have the capacity to absorb the residential displacements impacted by this project.

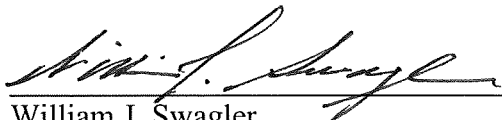
Commercial: The project may cause the displacement of approximately 30 businesses. A review of the St. Clair County commercial real estate market indicates that there are a sufficient number of replacement sites available to relocate eligible displaced businesses.

Non-Profit Organizations The project may cause the displacement of approximately 1 non-profit organizations. A review of the St. Clair County real estate market indicates that there is an adequate supply of properties available as replacement sites for eligible non-profit organizations.

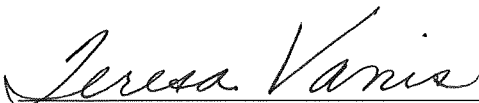
ASSURANCES

The acquiring agency will offer assistance to all eligible residential, commercial and non-profit displacees impacted by the project including persons requiring special services and assistance. The Agency's relocation program will provide such services in accordance with Act 31, Michigan P.A. 1970; Act 227, Michigan P.A. 1972; Act 87, Michigan P.A. 1980, as amended, P.A. 367 and 439 of 2006 as amended and the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended. The acquiring agency's relocation program is realistic and will provide for the orderly, timely and efficient relocation of all eligible displaced persons in compliance with state and federal guidelines.

Prepared By:


William J. Swagler

11-14-08
Date:


Teresa Vanis

11/14/08
Date:

**MEMORANDUM OF AGREEMENT BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION AND
THE MICHIGAN STATE HISTORIC PRESERVATION OFFICER
REGARDING
THE RELOCATION OF THE E.C. WILLIAMS HOUSE, 2511 10TH AVENUE
CITY OF PORT HURON, ST. CLAIR COUNTY, MICHIGAN
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR PART 800.6(b)(1)**

WHEREAS, the Federal Highway Administration (FHWA) of the U.S. Department of Transportation has determined that the proposed relocation of the E.C. Williams House, 2511 10th Avenue, City of Port Huron, St. Clair County, Michigan will pose an adverse effect upon this building, which appears to meet the criteria for listing in the National Register of Historic Places and has consulted with the Michigan State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) (the Act); and

WHEREAS, The Michigan Department of Transportation (MDOT) participated in the consultation and has been invited to concur in this Memorandum of Agreement (MOA);

NOW, THEREFORE, FHWA and SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on the historic properties.

STIPULATIONS

FHWA shall ensure that the following measures are carried out in a phased process. Phase I mitigation must be completed prior to the relocation of the E.C. Williams House. Phase II may occur within the specified timeframes noted herein.

I. PHASE I MITIGATION (to complete prior to the relocation of the E.C. Williams House)

A. Recordation

1. The E.C. Williams House shall be recorded so that there is a permanent record of its existence. MDOT shall prepare photographic documentation and a historical overview of the E.C. Williams House according to the SHPO *Documentation Guidelines* attached hereto as **Attachment A**. Unless otherwise agreed to by the SHPO, MDOT shall ensure that all documentation is completed and accepted by the SHPO for deposit in the State Archives of Michigan prior to the commencement of any demolition or construction activity concerning the E.C. Williams House. MDOT will provide additional original copies of the recordation package to appropriate local repositories designated by the SHPO.

2. MDOT shall include, if available, as part of the recordation package original or archival –quality copies of historic E.C. Williams House photographs; additionally, electronic versions of these photographs will be submitted.
- 3 MDOT shall, as part of the recordation package, provide photographic documentation of the building relocation process.

II. PHASE II MITIGATION

A. Relocation of the E.C. Williams House

1. MDOT shall consult with SHPO and the City of Port Huron in the development of an approved building relocation plan, site plan, and building rehabilitation plan.
2. MDOT shall provide all necessary utility hook-ups, including electrical, natural gas, water, and sanitary sewer at the relocation site.
- 3 MDOT shall secure all necessary permits and approval of the proposed building relocation route.
- 4 MDOT shall record existing conditions along the relocation route prior to and after the building relocation.
- 5 MDOT shall coordinate temporary relocation of overhead utilities, traffic signals and signs as needed to accommodate the building relocation.
- 6 MDOT shall coordinate adequate emergency services be available along the relocation route to assure public safety.
- 7 MDOT shall assure that any damage incurred during the relocation is repaired and that the condition of the building shall be the same or better than when acquired by MDOT.
- 8 MDOT shall assure the property is secured and maintained until possession is turned over to the new owner.
- 9 MDOT shall remove the existing Michigan Historic Marker and deliver same to SHPO or other designee.

B. Marketing of the E.C. Williams House

1. MDOT shall consult with SHPO in the development of a marketing plan for the E.C. Williams House.

2. MDOT shall consult with SHPO to develop a comprehensive and complete easement agreement defining the expected life-cycle of the rehabilitation, owner responsibilities for maintenance and retention of significant architectural features, and the process by which the owner shall consult with SHPO prior to performing significant work to the property.
3. MDOT shall relinquish ownership/control of the subject property to the new owner in the same condition or better as the property was when acquired by MDOT.

III. PHASE III MITIGATION

A. Rehabilitation of the E.C. Williams House (responsibility of new owner)

1. Rehabilitation plans will follow the Secretary of Interior Standards (Standards) for Rehabilitation of Historic Buildings, applicable local codes and Americans with Disabilities Act accessibility guidelines.
2. SHPO shall have the right to review and approve rehabilitation plans prior to the commencement of any rehabilitation activities.

B. Long-term Maintenance of the E.C. Williams House (responsibility of new owner)

1. The property owner will provide a maintenance plan outlining efforts to preserve and maintain the property throughout the agreed upon life-cycle.
2. SHPO shall retain the right to review and approve any proposed alterations or any work that may alter, remove, or damage architecturally significant features throughout the agreed upon life-cycle.

IV. GENERAL CONSIDERATIONS

A. Amendment

1. Any party to this MOA may propose to the other parties that it be amended, whereupon the parties will consult in accordance with 36 CFR800.6(c)(7) to consider such an amendment.
2. In the event that any portion of Phase II Mitigation (Stipulation II) is found to be infeasible, the parties to this MOA shall consult to consider appropriate alternative mitigation.
3. Any additional or alternative actions considered pursuant to this agreement shall be subject to implementation by amending this MOA in accordance with this section.

B. Dispute Resolution

Should the SHPO or MDOT object within 30 (thirty) days to any actions proposed pursuant to this MOA, the FHWA shall consult with the objecting party to resolve the objection. If the FHWA determines that the objection cannot be resolved, the FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within 45 (forty-five) days after receipt of all pertinent documentation, the Council will either:

1. Provide the FHWA with recommendations, which the FHWA will take into account in reaching a final decision regarding the dispute; or
2. Notify the FHWA that it will comment pursuant to 36 CFR 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by FHWA in accordance with 36 CFR 800.7(c)(4) with reference to the subject of the dispute.

C. Termination

1. If the FHWA determines that it cannot implement the terms of this MOA, or if the SHPO determines that the MOA is not being properly implemented, the FHWA or the SHPO may propose to the other parties to this MOA that it be terminated.
2. The party proposing to terminate this MOA shall so notify all parties to this MOA explaining the reasons for termination and affording at least sixty (60) days to consult and seek alternatives to termination. The parties shall then consult.
3. Should such consultation fail, the FHWA or the SHPO may terminate the MOA by so notifying all parties.
4. Should this MOA be terminated, the FHWA shall either:
 - a. Consult in accordance with 36 CFR § 800.6 to develop a new MOA; or
 - b. Request the comments of the Council pursuant to 36 CFR § 800.7.

Execution and implementation of this MOA and its submission to the Council evidences that FHWA has afforded the Council a reasonable opportunity to comment on the project and that the FHWA has taken into account the effects of the project on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: _____
James J. Steele, Division Administrator

Date: _____

MICHIGAN STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
Brian D. Conway, State Historic Preservation Officer

Concur:

MICHIGAN DEPARTMENT OF TRANSPORTATION

By: _____ Date: _____
Susan Mortel, Director, Bureau of Transportation Planning

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
February 21, 2008 10:00 a.m.
Organizational and Orientation Meeting

Participants: (see attached list)

Meeting Began at 10:15 a.m.

1. Project Overview and BWB PE/M Group Purpose

- Matt Webb welcomed all in attendance and provided background information and a general project update for everyone in attendance.
- Dave Wresinski indicated that MDOT Director Kirk Steudle has been briefed about the project issues and the intent of this group and requested that the team get creative with ideas, yet remain cognizant of the funding limitations that MDOT and FHWA have to work with.
- Reviewed the organizational structure of the state and federal participants of the group.
MDOT Participants will include:
 - Administration/organizational/follow-up: Matt Webb, Paul McAllister, Dave Wresinski, Sheryl Holcomb
 - MDOT Local Circulation Issues and Plaza Operations: Larry Young – TSC, and Mike Szuch – Plaza
 - MDOT Real Estate Issues: Tom Jay
- FHWA Participants: Will set parameters, providing information regarding federal funding and rules, and come up with creative solutions. What is decided for this project will set precedence for other projects - Ryan Rizzo.
- GSA Participants: Will be the designated spokesperson for GSA and representative for CBP. A CBP representative will be asked to attend the meeting when CBP issues need to be addressed.

2. Project overview and BWB PE/M Group Purpose:

- Karl Tomion indicated that the City is expecting a significant reduction in plaza size. The City still needs to be presented specific details on the plaza and justification from CBP on the size of the plaza. Matt Webb stated he thought the group should move forward with addressing the non-size dependant enhancement/mitigation issues while the CBP plaza size issues are being analyzed.
- Overview of the EIS timeline: The EIS schedule hasn't formally changed. Currently the FEIS is scheduled to be completed by this summer and the ROD is

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scheduled for late summer to early fall. However, working through all of the local concerns over the project will require time and the overall project schedule is anticipated to be extended

- Reviewed the National Environmental Policy Act Overview handout and specifics regarding the NEPA process. Once the FEIS is released it will need to be reviewed by FHWA. A legal sufficiency review will also be completed by FHWA. The group will try to work through the issues with the local representatives. MDOT does have the ability to submit the FEIS even if outstanding issues or conflicts still remain. The FEIS must document any outstanding conflicts that still remain. The Final EIS may or may not need Washington approval.
- MDOT has a need to work on the Black River Bridge. It has structural deficiencies, such as the decking is 5 + or - years left on the decking. Need to make the decision to replace the bridge because that is a 20 + years fix and we don't want to fix the bridge and then have to readjust based on the FEIS and the ROD.
- Tom Jay commented that even if the size of the plaza shrinks the relocation issues still exist and the displacements are the same.

3. Group Composition and Roles

- Port Huron Township should be included in this group. All concurred with this addition.
- The City asked if the St. Clair County Road Commission should be a part of the group. MSHDA was also mentioned as a potential addition to the group.
- It was agreed upon to bring in key people from these organizations when discussing issues that are specific to their agencies.

4. Discuss Draft Meeting Ground-rules and Procedures:

- MDOT provided a handout of the proposed group ground-rules for the group's consideration (See Ground Rules and Procedures – revised 2-26-2008).
 - Suggested modifications included: modify #8 from person to individual.
 - Add: Notify the group if there is a need to elevate a conflict to a political or executive management level of an agency.

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- WSA will set up a project specific FTP website to house the group's documents that will be accessible by the group members. Username and password will be sent to all. An e-mail will be sent to all group members notifying them when new material has been posted for review.
- It was agreed upon by the group that the group should remain at a staff level to discuss the technical comments submitted on the DEIS. It was agreed upon that at major milestones each representative would then report out progress to respective boards, commissions, stakeholder groups and the media.
- It was recommended that a media release be issued stating that the technical DEIS comments/issues are being addressed by MDOT who is coordinating this process with the appropriate staff from the impacted federal, state, and local agencies. The City volunteered to draft this statement and get it back to the group for review.
- The group needs to identify major reporting milestones to report out their preliminary findings to the media/public in press releases or updates. The milestones will be kept separate from the summaries.
- All meeting summaries will be provided on the WSA FTP website or by MDOT within three business days.

5. Establish Team Goals and Anticipated Outcomes:

- MDOT provided a handout outlining desired outcomes from their perspective from this group. (See Anticipated Outcomes & Goals – revised 2-26-2008)
- FHWA indicated that they are looking for balance from the following key areas: mobility, safety, economics, and environmental.
- GSA is looking to make sure that CBP's needs are met while acting as a mediator between the parties to obtain an acceptable solution.
- The City indicated their goal is to receive further justification for the overall plaza size. The City also expressed a concern for Port Huron Township (in their absence) regarding the increase in accidents occurring along the corridor and the need to perform improvements along the corridor immediately.
- The County indicated their goal is to keep an eye on the project from the 10,000 foot level and oversee how the finished project will affect the quality of life for the area residents.

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- The state and federal representatives indicated their goals were to make sure concerns are being addressed and to help facilitate when needed by the group.
- Representatives Espinoza and Gilbert need to be contacted again about participating with the group.

6. Identification of Enhancement/Mitigation Focus Areas:

- MDOT provided a handout listing the focus areas for mitigation/enhancement priorities. Recommendations should be provided to Sheryl Holcomb (holcombs@michigan.gov) or Matt Webb (webbma@michigan.gov) within two weeks. (See handout #2.21.08-3)

7. Schedule Future Meetings:

- Meetings will be held monthly on the third Thursday of the month.
- Location: City of Port Huron, City Manager's Office
- Time: 10:00 a.m. – 1:00 p.m.

ACTION Items:

- **Karl Tomion/Matt Webb:** Add Port Huron Township to the future group meetings.
- **Karl Tomion/Matt Webb:** Draft statement for public/media regarding this group effort and the purpose of the mitigation. Also need to remind public about the office hours. Need to mention this is a group consisting of federal, state, and local professionals that are conducting on-going discussions regarding the aspects and clarifying issues based on public comments made from the DEIS. Once the draft statement is crafted, all group members will be asked to provide comments before posting.
- **Group:** The group needs to develop milestone packages. Certain milestones will identify when to report out to media/public in press releases or updates. (*Note likely to be an on-going task*)
- **Group Invites as Needed:** Bring key people in to meeting when needed only. For example include St. Clair County Road Commission to future meetings that address issues that pertain to them. This would also need to be done for MISHDA (housing), etc.

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Project Enhancement/Mitigation (BWB PE/M) Group
February 21, 2008 10:00 a.m.
Organizational and Orientation Meeting

- **Group:** All changes and responses to questions should be provided to MDOT: Sheryl Holcomb (holcombs@michigan.gov) or Matt Webb (webbma@michigan.gov).
- **Holcomb/Webb/WSA:** All updates will be provided on the WSA FTP website or by MDOT within three business days. There will be various folders contained on this website, including a follow-up folder. All meeting handouts, summaries, etc. will be contained on this website also.
- **BWB EIS Team:** There will be separate meetings held for in-depth issues. The information from those meetings will be brought back to be discussed at the next monthly group meeting.

NEXT MEETING – THURSDAY, MARCH 20, 2008 10:00 A.M. – 1:00 P.M.

1. Review the spreadsheet (handout #2.21.08-3) for the next meeting. This will be the roadmap used throughout the mitigation process. Send any changes to Sheryl Holcomb or Matt Webb via email.
2. Review the last column, page 1 (Economic & Community Development) of the spreadsheet (handout #2.21.08-3). A proposal (Charting a New Vision: The Blue Water Bridge Plaza and the City of Port Huron – October 18, 2007) was provided to all group participants. Review the proposal for the next meeting. Come with comments for the next meeting.

Meeting Adjourned at 12:20 p.m.

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
March 20, 2008 10:00 a.m.
Economic and Community Development Meeting

Participants: (see attached list)

Meeting Began at 10:15 a.m.

1. Welcome and Introductions

- Matt Webb welcomed all in attendance and introduced Melissa Ziegler, Economic Specialist with Wilbur Smith Associates. Mark Sweeney was also introduced as the MDOT Project Manager who will be responsible for the oversight of the plaza design and construction and will implement the recommendations made from this group. Mark was invited to attend the meetings to become familiar with all the commitments made by this group.

2. Development of Economic Redevelopment Plan Proposal

(handout at 2-21-2008 meeting: Charting a New Vision: The Blue Water Bridge Plaza and the City of Port Huron – October 18, 2007)

- Presentation made by Melissa Ziegler (a copy of the presentation is available on the FTP website)
 - Karl Tomion requested clarification regarding the specifics of the proposal. Melissa Ziegler referred the group to the handout proposal (see above). Melissa stressed this is a community driven process that will require many meetings and interviews with various stakeholders. This effort is a venue where other community stakeholders can participate in the process. It is very important to look at trends that are influencing the community from the outside and to use the “vision” to develop a strategic plan, and ultimately a financing strategy.
 - It is envisioned that this plan development would be developed by a much larger steering committee. Community business and economic stakeholders should be invited to participate in this process.
 - The City indicated that the most important aspects from their perspective is creating a vibrant downtown and reducing unemployment for the area’s citizens.
 - Matt Webb asked the group for a commitment to proceed with this economic redevelopment plan proposal. Matt Webb stressed that the items listed under the Economic and Community Development column of the spreadsheet (handout #2.21.08-3) are the foundation of all the comments from the DEIS. Karl Tomion asked that the group not commit to this proposal until Melissa Ziegler and Doug Alexander have an opportunity to discuss

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
March 20, 2008 10:00 a.m.
Economic and Community Development Meeting

which economic community stakeholders should be involved. Doug andn Melissa will report back to the group before, or by the next meeting, the list of community participants that should be involved in this effort. The group will decide at that time whether to proceed with the proposal.

3. Discuss other Economic Development Commitments

- Matt Webb made a presentation summarizing the economic and community development project impacts along with MDOT's proposed mitigation strategies (a copy of the presentation is available on the FTP website). Once the plaza footprint is finalized the impacts and mitigation measures can be re-evaluated. The proposed strategies were developed to minimize any obstacles that may arise during the implementation phase of the redevelopment plan.

4. Comments on the February 21, 2008 Meeting Summary

Action Items:

- **Karl Tomion/Matt Webb:** A statement regarding this group effort and purpose was provided for the group to review (Blue Water Bridge Plaza EIS Update March 2008). This statement will be presented on March 20, 2008 to the Times Herald by Karl Tomion/Matt Webb. This statement will also be sent via the MDOT list serv.
- **Group: (ON-GOING)** - Develop milestone packages. Certain milestones will identify when to report out to media/public in press releases or updates.
- **Group Invites as Needed:** Future requests need to be circulated to the group for approval seven days prior to the meeting.
- **FTP website:** Wilbur Smith Associates has set up a project specific FTP website to house the group's documents that will be accessible by group members only. Username and password was provided to all group participants. An e-mail will be sent to all group members notifying them when new material has been posted for review. All meeting handouts, summaries, etc. can be found on the website. There are various folders contained on this website, including a follow-up folder. If group members have a problem accessing the website, please contact Todd Davis of Wilbur Smith Associates for assistance. **Note: all information contained on this website is to be considered draft working versions and is limited for review by only group participants.**

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
March 20, 2008 10:00 a.m.
Economic and Community Development Meeting

5. Other

- Jim Sharp from GSA stated CBP is still reviewing the local agency concerns regarding the size of the plaza. It was stressed throughout the meeting that this process will work in parallel with the design process. Todd Davis commented that this is only the preliminary design and there are certain limitations regarding the level of design during the NEPA phase. We need to keep the dialogue going.

NEW ACTION Items:

- **Shaun Groden:** Invite a representative from the County Road Commission to the next meeting.
- **Kim Harmer:** Provide Sheryl Holcomb with a copy of the M-25 Access Management Study for posting on the FTP website.
- **Sheryl Holcomb:** Ground Rules (See Ground Rules and Procedures – revised 3-20-2008) to be updated to include a statement that all information is not to be shared outside of group.

NEXT MEETING – THURSDAY, APRIL 17, 2008 10:00 A.M. – 1:00 P.M.

1. Review the first column, page 1 (Local Access & Circulation) of the spreadsheet (handout #2.21.08-3). Come with comments for the next meeting.
2. If time permits, discussion on the column labeled (Non-motorized Circulation & Access)

Meeting Adjourned at 12:30 p.m.

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
April 17, 2008 10:00 a.m.
Local Access and Circulation/Non-motorized Meeting

Participants: (see attached list)

Meeting Began at 10:05 a.m.

1. Updates on Economic Development Plan/Proposed Strategies from March meeting

- Todd Davis provided an update regarding WSA's Economic Development Specialist Melissa Ziegler's conversation with St. Clair County Economic Development Authority Director Doug Alexander after the March meeting.
 - Karl Tomion stated for the most part the city is fully developed, and for this reason the economic development plan study area should encompass a wider area than just the city. This regional approach would support the growth of new local employment opportunities for residents living in the city.
 - K. Tomion stated the township, city and county needs to get together with the EDA to write the scope and added that the entire county may be too large a scope and the city is too small.
 - Matt Webb asked if there were any concerns regarding the technical expertise of WSA's proposed specialist. K. Tomion indicated that locally they seem to be very pleased with her credentials and her experience.
 - K. Tomion asked about the timing of the study. M. Webb stated that it was the intent of MDOT/FHWA to amend WSA's existing contract (~approx. 6-8 weeks process). Work could then begin on developing the economic development plan immediately following the amendment.
 - **Next steps:**
 - T. Davis will contact Melissa Ziegler to move forward with finalizing the scope/strategies
 - Melissa Ziegler and Doug Alexander will revise the scope and MDOT will distribute a draft for all to review. Need to ensure size of scope doesn't preclude funding from FHWA

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
April 17, 2008 10:00 a.m.
Local Access and Circulation/Non-motorized Meeting

- K. Tomion mentioned that this is a positive message that should be conveyed to all of the local stakeholders. This is also an opportunity to include other stakeholders in the process
- Jim Warner requested access to the secure project website. Todd will send the FTP access to SCCRC.

2. Local Access and Circulation Mitigation and Enhancement Strategy Discussion

- M. Webb reviewed the benefits the I-94/I-69 corridor and plaza improvements will provide to the local communities including the full access interchange at Lapeer Connector and the realignment of M-25 NB. (*see attached ppt.*)
- K. Tomion stated he appreciated the redesign of the original M-25 alternative. He stated that some businesses are concerned that they are only getting one-way traffic. He's been told retailers would rather be on a two-way street than a one-way. K. Tomion stated it would be nice to have something quantifiable that shows the benefit of the one-way pairs for the adjacent businesses. K. Tomion added that additional access drives can be looked at if there is a quantifiable impact. Matt Webb stated that the design team will research the pros and cons of one-way pairs.
- Shaun Groden stated that M-25 north of the plaza is a concern to the county and that the bridge over the Black River Canal is an existing bottleneck.
- K. Tomion had a question about excess property, and asked if there is a possibility that excess property as a result of this project could be reused as development for the city. The city is also concerned with remnants of impacted parcels and asked that parcels be sized appropriately to allow for future redevelopment opportunities.
- **Formalize Alternate Route M-25:** (*See attached ppt. for MDOT overview.*)
 - Kirk Weston stated that the signed M-25 bypass is North Wadhams to Keewadin (M-136). He added that the Road

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
April 17, 2008 10:00 a.m.
Local Access and Circulation/Non-motorized Meeting

Commission advanced constructed the Wadhams Rd. bridge so it could be used as a possible detour route. The Road Commission is disappointed that it is no longer considered a detour route. He wants MDOT to understand there is a cost (associated with bonding) to what they did to accelerate the Wadhams Road bridge construction. (Note: Wadhams Bridge – Construction anticipated to start in 2009, and is anticipated to be finished by the end of 2010, which will provide a 4-lane crossing).

- M. Webb shared the maintenance of traffic (MOT) goals and indicated that detailed MOT plans and commitments will be made during the design phase. (see attached ppt.)
- The City stated they don't understand how operations on the plaza will be maintained during construction. B. Clegg stated he is concerned with the maintenance of traffic issues for businesses along Pine Grove. M. Webb proposed to hold a separate meeting (technical group before the next PEM meeting) to discuss a preliminary maintenance of traffic concept which the MDOT team has been working on.
- Scott Beedon voiced his frustrations that the corridor construction is being held up by the plaza. It was explained that the two projects are linked through the environmental clearance process. The preliminary construction staging plan is to construct the corridor first using staged construction techniques.
- The City stated that they haven't gotten anything they have requested from CBP and see that as being the biggest problem in moving forward with any further discussions of the plaza. Jim Sharp stated that GSA, FHWA, and MDOT are currently working with CBP to respond to the local comments within the DEIS. M. Webb stated that when MDOT receives the conceptual footprint from CBP, as well as their justification for the size, it will be presented to the PEM group. The City also wanted to clarify that they don't consider CBP's options as concessions but justification.

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- **Access Management Plan: (See attached ppt.)** M. Webb stated a plan was developed and is currently being followed by the city of Port Huron and Fort Gratiot Township. The exact location and the connectivity for all driveways will be addressed during the design phase. He added that the design staff and MDOT will meet with the city to ensure accessibility to businesses are addressed.
- **Synchronized Signals along M-25:** (See attached ppt.) M. Webb reviewed the findings of a February 2006 signal study that was completed by MDOT along Pine Grove Avenue.
- Bob Clegg stated the speed study progression speed of 35 doesn't seem to be accurate and that you have to drive 41 mph to not be stopped for lights. Matt Webb asked that Larry Young look into it.
- MDOT will commit to complete a follow-up signal optimization study along the Pine Grove corridor once the plaza expansion has been constructed to assure proper progression along this key north-south route.
- **Recreational Areas on the Black River/Water Ferry Option:** MDOT questioned the intent behind these two comments.
- K. Tomion stated the water ferry issue may have been related to potential casino improvements. A local idea was circulating around the community to have a ferry service that would take people from downtown to the Thomas Edison Site. Since the close of the comment period, another potential site has been considered on the Acheson site, which the city prefers. It was determined that no action is needed.
- Regarding the comment to improve access to recreational areas along the Black River/St. Clair River, the city believes the comment might have been because of the question of acquiring the marina. MDOT stated that based on the latest alternative layout, the Bridge Harbour marina will not be impacted by the project, and will not be acquiring the marina property. The city stated their primary focus of concern for boating is during construction and limiting access to the river.

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MDOT ensured the city that the MOT concept will incorporate boat traffic. It was determined that no mitigation/enhancement action is needed.

- **Widen Pine Grove/M-25 north of the Plaza:** (see attached ppt.) MDOT stated that this proposed mitigation measure is not directly tied to a direct or indirect impact of the expanded plaza nor does it address the purpose and need for the BWB EIS. M. Webb stated, in order to address this community need a separate study and environmental process would need to be completed. The MDOT team did perform a quick analysis of the possible impacts associated with widening M-25 to 7-lanes. The results of this analysis indicated that there will likely be significant impacts to existing businesses located along M-25, residential relocations, and floodplain impacts to the Black River.
- Shaun Groden stated the bridge over the canal is the bottleneck for the whole community, however understands the excessive cost due to ROW. Larry Young stated that possible alternative routes could be explored to address incident management issues.
- **Coordination Local Transportation Plan:** (see attached ppt.) M. Webb stated that MDOT will coordinate with the BWAT, the City and SCCTS during construction to assure adverse impacts to transit services during construction are minimized.
- Bob Clegg will submit the school transportation plan to MDOT. He stated there is an integral link with Lapeer Connector. He suggests the design team also work with school officials when working on the MOT concept to ensure bus routes are considered.
- **Non-Motorized Mitigation Strategy Discussion:** (See attached ppt.)
 - MDOT will commit to adding Pedestrian walkway to Black River Bridge
 - Local enhancement grant is available for path under Blue Water Bridge connecting 10th Avenue to Riverwalk. MDOT will work with city to facilitate this enhancement project.

Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
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- **Plaza Review Update**
 - GSA, FHWA, and MDOT continue to coordinate with CBP to get plaza layout and justification questions answered.
- **Schedule Next Meeting**
 - May 29, 2008, 10:00 a.m. with the focus of the meeting to be on the revised plaza layout.

ACTION Items:

- T. Davis will contact Melissa Zeigler to move with scope/strategies.
- MDOT will distribute to all for review and comments. The intent is to finalize the scope of work by the next meeting.
- T. Davis will send FTP access to SCCRC.
- M. Webb will schedule a technical working committee meeting before the next PEM meeting to review one preliminary maintenance of traffic concept for the plaza area
- M. Webb asked that Larry Young look into speed issue for the signal optimization comment.

The meeting was adjourned at 12:15 p.m.

Memorandum

TO: File

FROM: Matt Wendling, Wilbur Smith Associates

DATE: June 25, 2008

SUBJECT: Blue Water Bridge PE/M Group Meeting

PROJECT: Blue Water Bridge Plaza Study
JN 57779

Date/Time: June 12, 2008, 9:00 am

Location: City of Port Huron Conference Room

The following represents the key points of discussion at this meeting.

- Economic Development Plan
 - A revised scope of work for a development plan for St. Clair County was presented. All agreed to a week of review.
 - Karl Tomion requested clarification that the development plan is more from a county-wide point of view.
- Plaza Maintenance of Traffic
 - A summary of the June 2nd Maintenance of Traffic overview meeting was provided by Matt Wendling.
 - Karl asked when the city will get to see a revised maintenance of traffic concept for the new plaza layout, incorporating their comments from the last meeting. Matt Webb stated they will get a chance at the Engineering report stage, which will be submitted with the FEIS.
 - Karl expressed a concern with trucks taking local streets, creating their own detour.
- Recommended Plaza Presentation
 - Jim Sharp provided an overview of the process which has occurred to address concerns on the DEIS and reviewed the new alternative layout.
 - The city asked what type of wall/sound attenuator to alleviate noise around the plaza. Matt responded that it can be a community preference whether it's a wall or fence. This can be further resolved during the CSS stage and final design.
 - Bob Clegg expressed a concern with noise from the elevated relocated Pine Grove Bridge. He requested that the team clarify the difference in noise levels between proposed and existing in the FEIS.
 - The city is pleased with the absence of brokers on the Recommended Plaza.
 - The county asked why the residences north of Scott and north of Pine Grove were being saved. Matt Webb replied that MDOT, FHWA, CBP and GSA

reduced the size of the plaza footprint to minimize property acquisition on the project. If the revised plaza footprint touched or clipped any piece of a parcel (residential or business) MDOT considered that parcel a relocation. The whole parcels that remained are those properties that MDOT or CBP do not need for a long-term transportation or customs processing use.

- The city asked if a person stuck in those locations could sue for reverse condemnation?
 - The city requested that MDOT work cooperatively with them on their zoning of excess property to ensure the remaining parcels are adequately sized.
 - Sean Groden stated a concern with the entry to the plaza from relocated Pine Grove. He didn't believe there would be enough queue length if traffic was backed up.
 - Sean was also concerned with traffic entering the plaza having to merge with semis in the right lane. Sean also pointed out that there are weaves following the toll booths to go to PILS and Duty Free.
- BWB/Peace Bridge
 - Matt Webb reviewed a handout that provided a comparison between the revised plaza layout and the proposed Peace Bridge plaza expansion.
 - Bob Clegg asked how many passenger (visitor) spaces are there at the Peace Bridge. Matt Webb stated he would check and get back with Bob.
 - The city asked why CBP doesn't require outbound inspection at the Peace Bridge. The Peace Bridge authority has control over the entire structure, unlike the Blue Water Bridge which is split in half between countries.
 - The city asked what the Peace Bridge proposed facility was designed for. Matt Webb stated he believed it was also designed for 2025, however he will confirm.
 - Karl Tomian stated that the Recommended Plaza Alternative has a significant amount of space for future use and asked why the Peace Bridge doesn't. Matt Webb responded that the Peace Bridge is constrained by the river, the existing transportation network, and historic and protected 4(f) park properties.
- Matt stated the revised "recommended" footprint that will be presented in the FEIS. The FEIS is scheduled to be out by the end of the year. A comment period follows and once comments are addressed, a ROD is released and signed. The ROD is currently scheduled for early (spring) 2009. The FEIS will likely have a 30 day review period.
 - Karl asked if Matt could come to the council meeting for all 3 agencies (city, county, and township) to present the plaza to all parties. Karl suggested it be televised so that it would be broadcast to a larger audience. Karl would like to schedule the televised council meeting for June 23rd and 7:00 pm.
 - Bob Clegg stated the city was hoping to get current delay vs. post construction delay. He added it also is important to convey to the public the delays at the construction. Bob suggested we convey this to the public at the next meeting. Matt indicated that the WSA Team will be completing this analysis this summer and will attempt to provide the results of the analysis at the August P/EM Group meeting.
 - WSA will contact the city and P/EM Group members to arrange lunch for the July 17th meeting.

- PE/M website will have ALL material uploaded prior to the next meeting.

The meeting was adjourned at 12:00 p.m.



Sign In Sheet

Date: 6/12/08 Meeting for: Blue Water Bridge Plaza PE/M Meeting

Name	Agency/Company	E-mail Address	Phone
1) Tom Jay	MDOT- PE	JAYT@MICHIGAN.GOV	248-483-5168
2) Karl Torman	City of PH	torman K@port Huron.org	810-984-9740
3) Bob Clegg	City of PH	clegg@port Huron.org	810-984-9734
4) Al Smith	Community Coalition	2054476@comcast.net	810-985-4351
5) D Scott Robinson	PH TWP	SRobinson@PortHuronZionship.org	810 987-6600
6) Paige Williams	MDOT- METRO	williams p2@Michigan.gov	(248) 483-5155
7) Dan Grupado	MDOT- Port Huron	grupado@Michigan.gov	810-985-5011
8) Mark Duganway	MDOT- METRO	mark.duganway@Michigan.gov	248-483-3151
9) Jeff Wing	Community Coalition	jeffwing@jeffwing.com	985-5038
10) Kim Harmer	City of Port Huron	harmerk@port Huron.org	810 984-9735
11) Kristen Turnbull	Pavlov	Kturnbull@hazwmi.gov	800 517-373-1415
12) Bill Kaffman	St. Clair County	bkaffman@stclaircounty.org	810 984-1950
13) Karen Czerne	CG MILLER	Karen.Czerne@MAIL.Hur.org	586 997-5010
14) Jim Suerp	GSA	Jim.Suerp@GSA.GOV	
15) Shawn Groben	SCC		
16) Vicki Selva	Sen. Levin	Vicki.Selva@Levin.Senate.gov	586 573-9145
17) Larry Young	MDOT PH/TSC	Young.L@Michigan.gov	810 985-5011
18) Mike Such	MDOT BWS	szuchm@Michigan.gov	810 984-3131
19) Todd Davis	WSA		
20) Matt Wendling	WSA		
21) Sheldon Whitely	CBP - Indianapolis	Sheldon.Whitely@dhs.gov	317.614.4927
22) Ryan Rizzo	FILWA		
23)			
24)			

Memorandum

TO: File

FROM: Matt Wendling, Wilbur Smith Associates

DATE: August 15, 2008

SUBJECT: Blue Water Bridge PE/M Group Meeting

PROJECT: Blue Water Bridge Plaza Study
JN 57779

Date/Time: July 17, 2008/10:00am

Location: City of Port Huron Conference Room

Attendees:	Scott Beedon	Robert Clegg
	Karen Czernel	Todd Davis
	Thomas Hanf	Kim Harmer
	Tom Jay	Lynn Lynwood
	Paul McAllister	Phil Pavlov
	Vicki Selva	Jim Sharp
	Art Smith	Mark Sweeney
	Mike Szuch	Karl Tomion
	Matt Webb	Tom Weston
	Matt Wendling	Jeff Wine
	Larry Young	
	Pam Evans	

The meeting began at 10:05 a.m. The following represents the key points of discussion at this meeting.

Matt Webb provided an update on the Economic Development Plan;

- The scope of work has been finalized.
- MDOT received FHWA approval that plan is eligible for funding and can be worked on prior to ROD.
- Will go through contract amendment process and will be out September/October.

Matt provided an update on the following questions which were raised at last month's PEM Group meeting regarding the Peace Bridge POR;

- Passenger/visitor spaces
 - 315 parking spaces are for Federal employees only, there are also 100 additional spaces for visitors, brokers, etc.
 - Total of 415 spaces
- Brokers are still being proposed on the Peace Bridge
- Peace Bridge design year is 2040 (from a traffic and engineering standpoint), Blue Water Bridge is 2030, CBP's Program of Requirements (POR) for both plaza's is 2025

A follow up discussion of the combined City/County Council Meeting resulted in clarification of the Hancock Street improvements. The city asked if Hancock Street should be widened to accommodate future traffic demands (specific request was for a center-left turn lane to accommodate turning movements into adjacent businesses and plaza employee parking lot). Bob Clegg stated if a traffic simulation was available for Hancock and it's intersections with Pine Grove and 10th Avenue as it would help clarify the issue. Mark Sweeney stated that if Hancock were widened, additional ROW would most likely be required.

General Comments from Karl Tomion;

- City officials and residents are happy with reduction in parking, no brokers on the plaza and a commitment from MDOT to discourage detoured traffic on city streets; although they are disappointed that there is no change in the overall footprint. The impression was that footprint might decrease. He added that leaving pockets of parcels is a worse design than was outlined within the DEIS. He stated city officials believe they are being blamed for an alternative that is worse than before when the subject parcels were shown as a relocations within the DEIS.
- Karl assumed the constraints would be discussed further at the August PE/M meeting and believed it was critical that CBP is present. The questions the city would like addressed are;
 - How are booths going to operate?
 - What will be the future delays?
 - M. Webb clarified that the plaza layout and plaza elements were discussed at the July meeting. The delay analysis as previously requested by the city as part of their comments on the DEIS is still being finalized. This analysis will be presented at a future PEM Group meeting (either August or September).
 - Karl says it's very important to them to see delay analysis because if there aren't significant improvements in future delays, it doesn't match the impact to their city.
- The city was hopeful that the casino would be approved to help the offset the city's loss in tax revenue however it's been rejected. Karl stated there could be a substantive barrier to the project if MDOT doesn't justify the project clearly. Ill will is growing towards the federal government and isn't subsiding within the community.
- Some citizens are claiming that MDOT is directing them to the City. Tom Jay stated they are directing the public to contact their elected officials.

Both Karl Tomion and Scott Beedon agreed that they would rather have the parcels shown as full takes at this time, than leave pockets or residences and businesses .

Matt Webb asked the city if MDOT were to put together a voluntary purchase program, would the city support it. Karl Tomion stated they would.

Karl stated there are some creative solutions that the city could help with. Karl realizes MDOT has real constraints and appreciates the improvements MDOT has made. Karl requested that MDOT completes hardship cases that they have already started.

Jeff Wine asked if the value of the properties in the pockets has been determined. MDOT has not evaluated the properties

CSS and Aesthetic Commitments Comments: Todd Davis and Lynn Lynwood, MDOT explained the CSS process (see attached presentation). The following comments were made during or after the presentation;

- MDOT needs a commitment from the City and County to establish representatives that will be integral in the process.
- MDOT understands community wants a “WOW”, but fiscally cannot provide it at all locations. The community will have to identify their priorities.
- Jeff Wine asked if there will be a committee for both corridor and plaza or two separate committees. Matt Webb stated there will be only one.
- MDOT will need input from community to determine who will be on the Aesthetic Design Guide committee (approx. 30 people or less are desired). MDOT’s I-75 Gateway project was referenced.
- MDOT will put together a description of the process, who they are looking for, and other commitments. MDOT would like a product from the Aesthetic Design Guide by April (ROD date), but understands it will take time to get started. The commitment to undertake the Aesthetic Design Guide will be listed in the FEIS, however the timing and implementation of specific items will occur during the design process.
- MDOT would like to start the development of the Design Guide in October 2008.

Viewsheds and Cultural Entities:

- Viewsheds will be covered in the CSS/enhancement process
- Only historical property is E.C. Williams House and that will either stay or be moved and further identified as Historic.

Construction Impacts & Natural Environment Commitments: M. Webb reviewed the construction related impacts and natural environment columns of the PEM Group spreadsheet.

Mitigation for stormshed/detention basins:

- Discussion will include where they will be located and how they will look and will be undertaken during the design phase.

Public input for contaminated soils:

- MDOT follows Federal Guidelines for Remediation of Contaminated Soils

Air Quality:

- MDOT’s Tom Hanf reviewed the air quality and PM 2.5 commitments.

Floodplain:

- The city has heard concerns from residents upstream of the Black River Bridge about flooding in Port Huron Township. Bob Clegg stated this is most likely due to ice dams that are trapped at the bridge. He observed that when the river hasn’t been dredged and there is a buildup of debris and sediment immediately upstream of the bridge, ice collects. Bob asks that MDOT convey improvements to floodplain and bridge to the public.
- Port Huron is a Phase II community so if MDOT is discharging into their system they will be heavily involved.

Real Estate: Tom Jay and Pam Evans, MDOT Real Estate reviewed the real estate comments column.

- Tom Jay responded to the mitigation request that the city be compensated for city owned right-of-way such as city streets that will need to be vacated because of the project (i.e., Mansfield, Church, portions of 11th Ave., etc.)

- Tom Jay stated that MDOT follows State and Federal Guidelines and compensates all property owners that have a vested property right. A majority of all public right-of-way, including the city streets in question were established by Statute or Plat Dedication which give a right of occupancy, but not a compensable property right. If the right-of-way is abandoned, it reverts to the underlying property owners.
- Any property purchased for use in construction is typically held for three years before it could be considered for sale under the MDOT excess property procedures. The three year window is from open to traffic date.
- Karl Tomian asked if it would be possible for the city to get right of first refusal. Tom Jay stated he would look into it. Karl stated it could really be substantive and lead to more consensus on project.
- Bob Clegg stated the city didn't have a concept of the size of project when they were legally mandate to undertake the CSO project and asked if there was a way the city could be compensated for what they have already spent (for CSO work within the required footprint). Tom Jay replied that this is a utility question that he will look into. Bob will prepare an estimate of what the city has incurred in the project footprint and provide to Matt.

Loss of tax base: M. Webb reviewed the loss of tax base column.

- Scott Beedon asked why MDOT doesn't participate in PILOT programs. MDOT stated they don't want to set precedents.
- Scott Beedon is putting together what the township requires in secondary services to the corridor and will talk further to Matt. He said they currently are over their budget.
- Bob asked what the agreement was to account for inflationary factors for secondary services. Matt Webb said that inflation factors could be negotiated at the end of each agreement. For example the previous emergency services agreement has a horizon life of 10 years, when a new agreement is written a provision could be added to address this issue.

M. Webb stated that this completes the Enhancement/Mitigation package that MDOT/FHWA/GSA/CBP believes addresses the mitigation and enhancement comments submitted on the DEIS. In total, the package represents \$13.2 million dollars worth of mitigation/enhancement measures which will be implemented on the project above and beyond MDOT/FHWA's standard mitigation measures (i.e., noise walls, best practice construction methods, etc.) This commitment is approximately 7.3% of the construction estimate.

Other Comments:

Bob Clegg stated if Act 51 dollars are used on project through a community for a significant part of project, the city would be significantly impacted by their required participation requirements. What assurances do they have that they will be protected?

- MDOT currently looking at this and is currently working on cost estimates and a funding plan, however will be keeping Act 51 on their radar.
- Bob asked for the discussion to be continued and that an agreement reached.

Follow up items:

- WSA to present delay analysis at future meeting
- MDOT will work with city/county officials to address parcels left in pockets around the revised plaza layout.

- MDOT will put together a description of the Aesthetic Design Guide process (i.e., who is needed, commitment of time required, etc.) and transmit to city, county and PH Township officials for their consideration/action
- MDOT to review if it would be possible for the city to get right of first refusal for excess property on the project
- City of PH (B. Clegg) to provide MDOT (M. Webb) a cost estimate for the amount of improvements recently completed on CSO projects within the plaza footprint (for possible MDOT reimbursement)
- MDOT to discuss and review city of PH Act 51 issue
- MDOT would like to finalize the mitigation/enhancement process and discuss any further modifications (shifts in priorities, etc) at the August meeting.
- Next Meeting is August 21st at 10:00 am.

The meeting was adjourned at 2:45 pm.

**Blue Water Bridge
EIS Plaza Study
PEM Team Meeting Sign-in Sheet
July 17, 2008**

Name:	Organization Representing:	Phone Number:	E-Mail:	sign in by placing an "X"
✓ Beedon, Scott	Port Huron Township	810-987-6600	sbeedon@porthurontownship.org	
✓ Clegg, Robert	City of Port Huron	810-984-9730	cleggr@porthuron.org	X
Cutler, Randy	Citizen First/Bridge Coalition	810-985-0444	rcutler@cfsbank.com	
✓ Czernel, Karen	Office of Candice Miller	586-997-5010	Karen.czernel@mail.house.gov	X
✓ Davis, Todd	Wilbur Smith Associates	517-323-0500	tdavis@wilbursmith.com	
Funk, Robert	Chase/Bridge Coalition	810-989-3853	robert.j.funk@chase.com	
Groden, Shaun	St. Clair County	810-989-6900	sgroden@stclaircounty.org	
Gumbleton, Tomiko	Office of Senator Debbie Stabenow	313-961-4330	Tomiko_gumbleton@stabenow.senate.gov	
✓ Harmer, Kim	City of Port Huron - Planning	810-984-9735	harmerk@porthuron.org	X
Holcomb, Sheryl	MDOT - Planning	517-335-4206	holcombs@michigan.gov	
✓ Jay, Tom	MDOT - Real Estate	248-483-5168	jayt@michigan.gov	
Kauffman, Bill	St. Clair County - Planning	810-989-6950	bkauffman@stclaircounty.org	
✓ McAllister, Paul	MDOT- Environmental	517-335-2622	mcallisterp@michigan.gov	
Richardson, Megan	Office of Representative Phil Pavlov	517-373-1790	mrichardson@house.mi.gov	
Rizzo, Ryan	FHWA	517-702-1833	ryan.rizzo@fhwa.dot.gov	
✓ Selva, Vicki	Office of Senator Carl Levin	586-573-9145	vicki_selva@levin.senate.gov	X
✓ Sharp, Jim	General Services Administration	312-353-5601	Jim.sharp@gsa.gov	
✓ Smith, Art	Community Coalition	810-985-4351	acs4476@comcast.net	X
✓ Sweeney, Mark	MDOT- Design	248-483-5151	sweeneym@michigan.gov	
✓ Szuch, Mike	MDOT Blue Water Bridge	810-984-3131	szuchm@michigan.gov	✓
✓ Tomion, Karl	City of Port Huron	810-984-9740	tomionk@porthuron.org	X
Turnbull, Kristen	Office of Representative Phil Pavlov	517-373-1915	kturnbull@house.mi.gov	
✓ Webb, Matt	MDOT - Planning	517-335-4627	webbma@michigan.gov	
✓ Wendling, Matt	Wilbur Smith Associates	517-323-0500	mwendling@wilbursmith.com	
Whitely, Sheldon	CBP - Indianapolis	317-614-4927	Sheldon.Whitely@dhs.gov	
Wresinski, David	MDOT - Planning	517-373-8258	wresinskid@michigan.gov	
✓ Young, Larry	MDOT - Port Huron TSC	810-985-5011	youngl@michigan.gov	

STAND

6709 Centurion Drive, Suite 220 – Lansing, Michigan 48917
517.323.0500 Fax: 517.323.9200

**Blue Water Bridge Plaza EIS
Project Enhancement/Mitigation (BWB PE/M) Group
Meeting Summary**

Date: August 21, 2008

Location: City of Port Huron Conference Room

Attendees: See attached sign-in sheet

The meeting began at 10:15 a.m. The following represents the key points of discussion at this meeting.

Ryan Rizzo provided an update on the Economic Development Plan;

- All federal procurement guidelines must be followed when selecting the consultant.
- Work cannot begin before the Record of Decision (ROD).

Shaun Groden asked if the work could begin immediately. Ryan said this work could not begin until after the ROD. The group would like the work to begin as soon as possible. Ryan and M. Webb will discuss and provide an update at the next meeting.

Todd Davis gave an update and reviewed the map for Widening of Hancock.

Todd Davis gave an update on the Delay/Traffic Analysis;

- Quantifies existing delays at the border and compares to future projections.
- Similar methodology used as the Peace Bridge Study.
- The model replicates the actual and then progresses to the future year.
- Will be available at the next meeting.
- Primary Inspection Booth Sensitivity Analysis will also be conducted.

Shaun asked if the Blue Water Bridge is currently doing this type of analysis. Mike Szuch answered they are currently doing a visual analysis. Shaun said he's not certain that MDOT can get any relevant data from this kind of analysis.

Karl Tomion informed the group that the City has hired BLA (Bernard Lochmuller and Associates) to perform an independent review of the traffic study. They will look at what assumptions were used and provide the City with a professional assessment of the work done to-date. Bob Clegg will coordinate this study. All information requests need to be submitted to Matt Webb.

Todd mentioned roundabouts will be under review however the roundabout on relocated Pine Grove might be going away. Shaun said they are good either way but are concerned with the exit from the residences north of Pine Grove, next to the plaza. They do not like the idea of residents having to make a right turn to then turn left for the boulevard option. This change must be approved by MDOT's Engineering Operations Committee (EOC). The resolution of this issue may go into the design phase of the project.

Matt DeLong provided an update on the real estate acquisition process;

- It was MDOT's initial intent to try to save as many homes not affected by permanent construction, thus the isolated areas south of the proposed plaza. However no matter what MDOT does to avoid them, the properties will be impacted during construction (air, noise, etc). MDOT will not leave any area isolated and wants to work with the city. MDOT is looking at the triangular area south of Pine Grove to see if they will be impacted during construction. The properties might be undesirable after construction if they are no longer surrounded by a developed neighborhood. MDOT has not completed their analysis and will look closely at acquisition to avoid inverse condemnation. Additional discussions between MDOT and the city are underway.

Karl Tomion asked for an explanation of inverse condemnation. M. DeLong explained this is a citizen's approach for filing a claim to have their property purchased by the state. The property is considered damaged due to construction (runoff, construction materials stockpiled next door, noise).

Todd provided an overview and status of the Aesthetic Design Guide;

- The guide will help prioritize what the community wants to have incorporated into the design.
- HNTB will be the lead.
- FHWA approved this contract amendment to begin prior to the ROD.
- The contract amendment will be awarded by October 1, 2008.

Shaun inquired about who is responsible for maintenance if there are plantings, etc. Todd referred to Lynne Lynwood's presentation at the July meeting where she said this would be turned over to the City/County. This will have to be thought out and discussed thoroughly beforehand as it will be an additional cost the City/County will incur.

Shaun asked if there is any guidance as to how to select volunteers for the Community Advisory Group (CAG). Todd will discuss with M. Webb. The City/County will set up a conference call with MDOT (M. Webb/L. Lynwood) to discuss details of the Community Advisory Group (CAG) and provide a short list of names at the next meeting.

Bob Clegg presented the Combined Sewer Overflow (CSO) work to-date and impacts;

- Some pipes are new and the City is still paying debt retirement on them (watermain, CSO and Street work). The City implemented CSO work around the fringes, however didn't know what the entire footprint was going to be to stop all the work. The City should have unfettered access to utilities.
- They were required to build some utilities by the State and had to bond for them, now the State is asking them to be removed.
- The City will bring more details and the cost estimate to the September meeting.

T. Davis asked the group to review the PEM Group spreadsheet (matrix) and provide feedback and identify priorities;

Local Access and Circulation:

- Short-term versus long-term impacts; how will traffic be handled during construction? The City is happy with the current plan; build corridor first, build Pine Grove first, build plaza to outside of existing, then demolish existing for future expansion.
- Bob commented there is concern over the number of lanes available to the relocated road way. Need to get lanes built as soon as possible and the bridge and freeway constructed before the plaza.
- Kim Harmer commented that there is also concern over the children walking to school in this area. MDOT and the City will need to coordinate well with the school district.

- Shaun stated he is still concerned with M-25 north of the plaza (widen M-25 issue)
 - He feels this is still the opportunity for MDOT to investigate this issue and provide a solution.
 - What is MDOT's plan to address the issue for local communities?
- Dave Wresinski stated that the M-25 issue is not a component of this document however it will be an issue that will need further discussion. Capacity increase projects are not in the MDOT five year program due to the state of the economy. Dave also mentioned that there are severe ROW issues to also consider. Shaun understands there will be businesses and residences affected but this area cannot be ignored further. The County wants a commitment to do something. The county feels it will be an encouragement to get businesses to move in.
- Bill Kauffman mentioned that access management is a very huge issue. Businesses move because they are hard to access. The community knows this is not a high ranking priority for MDOT, but this has been studied to death with nothing done so far. The community needs a commitment to fix this problem.
- Shaun asked that the minutes reflect this as a priority over the ferry system.

Increased Emergency Services & Utility Burdens:

- City/County is completing an analysis and wants to discuss further with MDOT. Shaun stated that the current amount isn't enough and is nothing more than a small stipend. When was the amount originally negotiated? MDOT will investigate and provide an update at the next meeting.
- Shaun asked if MDOT could provide information for similar situations at other facilities (Ambassador, Soo, etc).
- Shaun stated that according to MDOT the toll share is no longer an issue and there are laws that need to be negotiated. Shaun stated this is still an issue with them and there should be a way to work around this.
- Wants the rational on how the current relatively small amount of bridge tolls was determined.

Acquisition of Property:

- Shaun stated the Holiday Inn depends on being on the corridor. They need 18 months to build a new building, so what kind of assistance can they get? Shaun wants an effort to get them moved and open for business right away. The ideal situation is to close and open on the same day. Matt DeLong replied that MDOT has no additional funds available for commercial acquisitions and the agreement with the city was they would take no action on businesses. There are no options available using traditional methods so they are looking at non-traditional methods. MDOT bought all residential hardships that could be bought and some are still pending. There will be no actions on property until the environmental document is complete. MDOT and the City will continue to have further discussions.

Non-Motorized Circulation & Access:

- Karl asked why the plaza layout exhibits do not show the continuation of the sidewalk from the plaza to St. Clair River.
 - Kim Harmer said MDOT did discuss assisting in providing a grant of \$500K for that work.
 - Karl pointed out that the chart is confusing (\$3M states from Township Park #1 to Edison Parkway).
 - There needs to be clarification as to the specific length/location of the pathway for the non-motorized crossing of the Black River.

Economic & Community Development:

- Karl asked MDOT to provide an update on the Chamber of Commerce plans at the next meeting.
 - Kim asked how the amount for a new Chamber of Commerce building will be used. Where is the funding coming from and will there be any flexibility?

- MDOT responded that the funding will come from MDOT and there will be some flexibility with it.
- Karl requested an update on the Welcome Center relocation at the next meeting.

Real Estate Process & Commercial/Business Impacts:

- Karl commented that a commitment in the FEIS for excess land to be gifted to the City for redevelopment cannot be resolved at this point.

CSS & Aesthetic Commitments:

- E.C. Williams House
 - The question is what makes it historical? Is it the location or the person who lived in the house?
 - Paul McAllister will be working with SHPO to determine if the home should be moved.
 - Kim will look at the historical significance and begin discussions with the local historical society.
- Aesthetic Design Guide
 - The group requested a schedule from the consultant.

Plaza Operational Characteristics:

- Shaun's biggest concern is the staffing of all the new booths.
- Karl remarked there have been changes in the design since the first document and the City's assuming the mitigation for light, noise and air is also being refined.
- The City claimed that since the previous air and noise studies, Pine Grove has been elevated and the truck parking has moved to the north side of the plaza, closer to the community.

Act 51 Match:

- Todd said there still isn't a resolution. Andy Irwin stated MDOT is still investigating options and will provide an update at the next meeting.

Lost Tax Base: See comments under Increased Emergency Service & Utility burdens.

The meeting was adjourned at 12:20 p.m.

Follow-up items:

- MDOT/FHWA (M. Webb/R. Rizzo) will discuss when work can begin for Economic Development Plan and provide an update at the next meeting.
- MDOT (M. Webb) to provide guidance for selecting Community Advisory Group (CAG) to County (Shaun).
- MDOT to provide Act 51 Match available options at September meeting.
- MDOT to investigate the Emergency Services Agreement and determine: when it was negotiated with the City/County; what was the rationale in determining the amount; and what are they doing at other similar facilities (Ambassador, Soo, etc.) and provide update at September meeting.
- MDOT to provide update on Chamber of Commerce plans (specifically how the amount for a new building will be used, where the funding is coming from, and if there is any flexibility) for the next meeting.
- MDOT (M. Webb) to provide update on Welcome Center location.
- MDOT (M. Webb) to identify the location of the pathway for the non-motorized crossing of the Black River at the next meeting.
- County (Shaun) to provide short list of names for CAG at September meeting.
- City/County will provide information regarding emergency services costs and report at next meeting.
- City of PH (B. Clegg) to provide cost estimate for improvements recently completed on CSO projects within the plaza footprint (for possible MDOT reimbursement) to September meeting.
- City (K. Harmon) to investigate historical significance of the E. C. Williams House and provide update at future meeting. MDOT (P. McAllister) to work with SHPO to determine if home should be moved.
- WSA/HNTB will provide schedule for the ADG at the next meeting.
- WSA to present Delay/Traffic Analysis at September meeting.
- Next meeting is September 18, 2008 at 10:00 a.m.

**Blue Water Bridge
EIS Plaza Study
PEM Team Meeting Sign-in Sheet
August 21, 2008**

Name:	Organization Representing:	Phone Number:	E-Mail:	sign in by placing an "X"
Beedon, Scott	Port Huron Township	810-987-6600	sbeedon@porthurontownship.org	
Clegg, Robert	City of Port Huron	810-984-9730	cleggr@porthuron.org	X
Cutler, Randy	Citizen First/Bridge Coalition	810-985-0444	rcutler@cfsbank.com	
Czernel, Karen	Office of Candice Miller	586-997-5010	Karen.czernel@mail.house.gov	✓
Davis, Todd	Wilbur Smith Associates	517-323-0500	tdavis@wilbursmith.com	X
Funk, Robert	Chase/Bridge Coalition	810-989-3853	robert.j.funk@chase.com	
Groden, Shaun	St. Clair County	810-989-6900	sgroden@stclaircounty.org	Here
Gumbleton, Tomiko	Office of Senator Debbie Stabenow	313-961-4330	Tomiko_gumbleton@stabenow.senate.gov	
Harmer, Kim	City of Port Huron - Planning	810-984-9735	harmerk@porthuron.org	✓
Holcomb, Sheryl	MDOT - Planning	517-335-4206	holcombs@michigan.gov	X
Jay, Tom	MDOT - Real Estate	248-483-5168	jayt@michigan.gov	✓
Kauffman, Bill	St. Clair County - Planning	810-989-6950	bkauffman@stclaircounty.org	✓
McAllister, Paul	MDOT- Environmental	517-335-2622	mcallisterp@michigan.gov	✓
Richardson, Megan	Office of Representative Phil Pavlov	517-373-1790	mrichardson@house.mi.gov	
Rizzo, Ryan	FHWA	517-702-1833	ryan.rizzo@fhwa.dot.gov	✓
Selva, Vicki	Office of Senator Carl Levin	586-573-9145	vicki_selva@levin.senate.gov	
Sharp, Jim	General Services Administration	312-353-5601	Jim.sharp@gsa.gov	
Smith, Art	Community Coalition	810-985-4351	acs4476@comcast.net	✓
Sweeney, Mark	MDOT- Design	248-483-5151	sweeneym@michigan.gov	✓
Szuch, Mike	MDOT Blue Water Bridge	810-984-3131	szuchm@michigan.gov	✓
Tomion, Karl	City of Port Huron	810-984-9740	tomionk@porthuron.org	✓
Turnbull, Kristen	Office of Representative Phil Pavlov	517-373-1915	kturnbull@house.mi.gov	X
Webb, Matt	MDOT - Planning	517-335-4627	webbma@michigan.gov	
Wendling, Matt	Wilbur Smith Associates	517-323-0500	mwendling@wilbursmith.com	✓
Whitely, Sheldon	CBP - Indianapolis	317-614-4927	Sheldon.Whitely@dhs.gov	
Wresinski, David	MDOT - Planning	517-373-8258	wresinskid@michigan.gov	X
Young, Larry	MDOT - Port Huron TSC	810-985-5011	youngl@michigan.gov	

Blue Water Bridge EIS Plaza Study PEM Team Meeting Sign-in Sheet

August 21, 2008

GUESTS

[illegible]



Memorandum

TO: File

FROM: Matt Wendling, Wilbur Smith Associates

DATE: September 29, 2008

SUBJECT: Blue Water Bridge PE/M Group Meeting

PROJECT: Blue Water Bridge Plaza Study
JN 57779

Date/Time: September 25, 2008 10:00 am

Location: City of Port Huron Conference Room

Attendees: See attached sign-in sheet

The following represents the key points of discussion at this meeting.

Delay Analysis

Shaun Groden wanted a preview of what Delay Analysis is and not just the results. He also asked if there was benchmark or datum that the Delay Analysis was calibrated against. Todd responded that the benchmark is based on data collected in the field. Shaun requested that the information be presented to a 5th grade level as he will have to pass the same information on to the public. Shaun asked for MDOT to present only what the delay is across the bridge and wanted clarification on the time it takes from booth to booth.

The city asked if the delays could be shown in an average time and range of times.

Bob Clegg asked for a copy of the input data. Todd stated the input data (minus the field observation) has been provided to the city in the Traffic Analysis.

The Delay Analysis Technical Memorandum will be sent out in advance of the FEIS.

Shawn asked if the secondary operation affects the Delay Analysis. Dave Dulong responded that under normal operations in the secondary inspection facility the queues in primary will not be affected.

Matt extended an offer to get another group together to further discuss analysis at a more (or less) technical level.

Property Acquisition

MDOT will acquire properties north of Pine Grove due to potential inverse condemnation issues and conflicts with construction activities. MDOT cannot make the same case with property

between freeway/Pine Grove and Scott. Properties are adjacent to active neighborhoods across Scott and there is area behind homes to screen freeway.

Matt stated the roundabout on Pine Grove has been removed from further consideration. Art Smith asked if there will be a press release stating the roundabout will be removed. Matt stated he wanted to combine efforts with the city and county to show that it was a consensus decision to show both the roundabout removal and the removal of "oasis".

Shaun asked if the oasis property will be developable after it is condemned and what condition it will be in. He also asked if there will be ingress and egress? Matt stated the design team will look into the requirements for access management. Matt stated we could look at the new configuration for access management and the language will be in the FEIS.

Matt Delong stated after the project is complete, the property will be considered excess. Scott Beedon requested a list of areas of potential excess property. Matt Delong stated that until the project is complete, MDOT will not be able to provide this information. MDOT's goal is to return the maximum amount of excess property to the City's tax role.

Matt stated the FEIS will have the ultimate footprint which shows the area of potential excess. Bob replied that they will need to know what will be required as permanent take and what will be potentially excess.

Scott Beedon stated the time delays on the project is costing them a lot as he is putting so much on hold with their master plan and developers. He cannot tell a developer where and when they might be able to relocate.

Shaun Groden stated that he will sign off on the FEIS that they are in agreement with MDOT's decision to take back the properties in the oasis, however he will not agree that MDOT reduced the size of the plaza. Matt Delong stated that the letter from the city should be separated; that they concur with the plaza layout and taking of the properties in the "oasis" and that the city would like to acquire any properties that may be considered excess.

Emergency Services

The City/ County/ Township stated the amount proposed by MDOT is not enough for their current need. Matt stated MDOT cannot increase the amount unless they can provide rational that they need more.

Utilities

MDOT will pay the city for CSO work that was completed within the footprint of the proposed plaza. Bob stated there will be a break in the system (utilities) and they (he) will provide a link to maintain the system.

The meeting was adjourned at 12:45pm.

Blue Water Bridge Plaza EIS Project Enhancement/Mitigation (BWB PE/M) Group Meeting Summary

Date: October 16, 2008

Location: City of Port Huron Conference Room

Attendees: See attached sign-in sheet

The meeting began at 10:15 a.m. Matt Webb welcomed all and introductions followed. Scott Beedon announced that this is his last meeting and introduced Bob Lewandowski as his replacement at the township. Karl Tomion informed the group that he is now representing the city as a consultant.

Matt asked for any comments from the September 25 Meeting Summary.

The following represents the key points of discussion at this meeting:

Follow-up Action Items

Economic Development Plan RFP Sub-committee:

- The Economic Development Plan will be advertised as an RFP.
- Karl Tomion stated he would like to see Doug Alexander from the Economic Alliance and Kim Harmer and Bill Kauffman as representatives from the city/county.
- Matt stated MDOT is currently working on the RFP and the goal is to have the consultant and contract in place once the ROD is signed.
- Matt will coordinate this effort with Doug, Kim and Bill.

Aesthetic Design Guide Committee Membership:

- Matt informed the group that the contract amendment has been approved and Pete Kinney (HNTB) will lead this effort and be the point of contact.
- Matt provided available meeting dates and asked that the city/county/township work with Kim Harmer to come up with a list of individuals for this committee. Kim will coordinate with Sheryl Holcomb.
- MDOT is pulling together a list of interested individuals that were identified from the office hours.
- Preferred Kick-off Meeting date is November 10.

Delay Analysis Comments:

- MDOT is preparing the technical memorandum.
- Bob Clegg said the city is pulling together comments and will formalize them when they receive the technical memorandum.

Great Port Huron Chamber of Commerce Update:

- Matt met with Vicki Ledsworth on October 15 to discuss facilitating the local tourist info center effort. The Chamber of Commerce (Chamber) is very interested and the plaza construction timeline should coincide well with the Chamber's expiration of their three year lease.
- MDOT will provide \$300K toward equipment costs, facility costs, construction, etc.

- The Chamber will be looking for a new facility and wants a closer presence with the plaza and relocated Pine Grove.
- Vicki will brief the board and thinks it's a good opportunity for the Chamber to promote tourism in the city.
- Matt mentioned that the FEIS mitigation section will identify the Chamber as the responsible party for this effort.

Emergency Services Payment Update:

- Shaun informed the group that the city/county have been involved in internal discussions and hope to provide some feedback to MDOT very soon. Karl said that he needs to discuss this topic with the new city manager.

ROW Update

FEIS Language: An updated ROW map and Draft FEIS language addressing the excess property was handed out to the group.

- Shaun requested a 3D image of the area to the south of the plaza (Pine Grove and 10th Ave). He wants to see what the property will look like in the future. Matt will work with the team to see if a static image can be created because the area to the north has changed significantly.
- Karl asked if it is policy that the excess property will not be available until 2 – 3 years after construction. Matt stated that as soon as MDOT feels comfortable that the property will no longer be needed, it may be released sooner.
- Karl stated there are several viable businesses that are asking if they could relocate on the excess property during the construction process. Tom Jay responded that property will not be available until FHWA is convinced there is no longer a need.
- Karl stated the Land Use Plan was supposed to be a task during this project and wanted to ensure the excess parcels were properly zoned as commercial, because most of the areas are currently zoned residential.

Drainage:

- Bob recommended the expandable area in the center of the plaza be used for temporary detention facilities which can be converted to subterranean later when the plaza is expanded further.

FEIS Development Update

- Matt would like to finalize the mitigation spreadsheet because all the information will be put in the FEIS. The anticipated timeline is for agency review in November and release to the public in December or early January. Each category item on the spreadsheet will be summarized with the mitigation commitment language and the dollar amount. Any outstanding items will be documented in the FEIS.

Project Enhancement Chart:

- Matt asked if the city/county agrees with the mitigation resolutions to date, as MDOT needs to maintain the FEIS schedule.

The city/county requested a recess from 11:00 am – 12:00 pm.

- The city/county returned and admitted they have not had an opportunity to meet to discuss the mitigation issues.
- Karl stated they want to make a commitment on the mitigation resolutions but they first need to have a discussion with the elected officials. The city/county will do their best to provide their

comments as soon as possible so MDOT can stay on their timeline; but it all depends on the reaction from the elected officials.

- Matt said there will be time available between the FEIS and the ROD to work through any additional mitigation issues.
- The city/county requested an additional PE/M meeting in November.
- The city/county wants to work on getting a comprehensive response to MDOT but there's no guarantee they will have resolution by next month.
- Karl feels they have a lot of good news for the elected officials and feel the design is much improved from what was originally proposed.
- Impacts during construction is something they have been very please with.

Other

- Bob Clegg asked when they will know what their share of ACT51 participation will be. Matt stated it would be after the FEIS and prior to the ROD.
- The city requested a copy of comments from other agencies that might affect the decisions that were made to-date.
- Phil Pavlov asked if MDOT sees any roadblocks from other agencies in the mitigation package. Matt stated they (MDOT) have cleared the process with other agencies and have gotten approval. FHWA hasn't agreed to fund all mitigation items but MDOT has committed to step up and pick up those extra items.

The meeting was adjourned at approximately 1:00 pm.

Next Meeting is November 20.

Blue Water Bridge
EIS Plaza Study
PEM Team Meeting Sign-in Sheet
October 16, 2008

Name:	Organization Representing:	Phone Number:	E-Mail:	sign in by placing an "X"
Beedon, Scott	Port Huron Township	810-987-6600	sbeedon@porthurontownship.org	X
Clegg, Robert	City of Port Huron	810-984-9730	cleggr@porthuron.org	X
Cutler, Randy	Citizen First/Bridge Coalition	810-985-0444	rcutler@cfsbank.com	
Czernel, Karen	Office of Candice Miller	586-997-5010	Karen.czernel@mail.house.gov	
Davis, Todd	Wilbur Smith Associates	517-323-0500	tdavis@wilbursmith.com	
Funk, Robert	Chase/Bridge Coalition	810-989-3853	robert.j.funk@chase.com	
Groden, Shaun	St. Clair County	810-989-6900	sgroden@stclaircounty.org	X
Gumbleton, Tomiko	Office of Senator Debbie Stabenow	313-961-4330	Tomiko_gumbleton@stabenow.senate.gov	
Harmer, Kim	City of Port Huron - Planning	810-984-9735	harmerk@porthuron.org	X
Holcomb, Sheryl	MDOT - Planning	517-335-4206	holcombs@michigan.gov	X
Jay, Tom	MDOT - Real Estate	248-483-5168	jayt@michigan.gov	X
Kauffman, Bill	St. Clair County - Planning	810-989-6950	bkauffman@stclaircounty.org	X
McAllister, Paul	MDOT- Environmental	517-335-2622	mcallisterp@michigan.gov	X
Richardson, Megan	Office of Representative Phil Pavlov	517-373-1790	mrichardson@house.mi.gov	
Rizzo, Ryan	FHWA	517-702-1833	ryan.rizzo@fhwa.dot.gov	
Sharp, Jim	General Services Administration	312-353-5601	Jim.sharp@gsa.gov	
Smith, Art	Community Coalition	810-985-4351	acs4476@comcast.net	X
Sweeney, Mark	MDOT- Design	248-483-5151	sweeneym@michigan.gov	X
Szuch, Mike	MDOT Blue Water Bridge	810-984-3131	szuchm@michigan.gov	
Turnbull, Kristen	Office of Representative Phil Pavlov	517-373-1915	kturnbull@house.mi.gov	
Webb, Matt	MDOT - Planning	517-335-4627	webbma@michigan.gov	X
Wendling, Matt	Wilbur Smith Associates	517-323-0500	mwendling@wilbursmith.com	X
Whitely, Sheldon	CBP - Indianapolis	317-614-4927	Sheldon.Whitely@dhs.gov	
Wresinski, David	MDOT - Planning	517-373-8258	wresinski@michigan.gov	
Young, Larry	MDOT - Port Huron TSC	810-985-5011	youngl@michigan.gov	

GUESTS

-5-

Blue Water Bridge Plaza EIS Project Enhancement/Mitigation (BWB PE/M) Group Meeting Summary

Date: November 20, 2008

Location: City of Port Huron Conference Room

Attendees: See attached sign-in sheet

The meeting began at 10:15 a.m. Matt Webb welcomed all and introductions followed.

Matt asked for comments from the October 16 Meeting Summary.

The following represents the key points of discussion at this meeting:

Resolution of Outstanding Issues: Matt W. provided a handout outlining the Outstanding Enhancement/Mitigation Items (*See attached*)

Major Outstanding Issues

1. Plaza Footprint:

- Shaun Groden asked if there will be development restrictions on the excess property and if there will be access from Pine Grove to the property south of the plaza? Matt Webb answered CBP stated in a previous meeting; there will be no restrictions outside of the buffered area; however CBP does restrict landscaping along the perimeter wall. Access is planned from Pine Grove Avenue but it must be in compliance with MDOT's Access Management policy.
- Karl T. inquired if there was a noise barrier in the plaza footprint? Matt W. responded that based on the FEIS analysis a sound wall on the west side of M-25 did not qualify based on MDOT's and FHWA's noise policies for the following reasons:
 - Splitting traffic to the east was one of the factors influencing the reduction in noise levels
 - It did not meet the cost per benefiting receiver threshold contained within MDOT's noise policy
 - Discussion regarding noise analysis – the change between current noise levels and the Recommended Alternative levels will be documented in the FEIS
 - A reevaluation will be completed during the design phase if a major shift in the alignment of the alternative occurs which would impact the eligibility of noise walls

2. Act 51:

- Matt W. gave a general overview of Act 51 and presented an option to minimize the impacts of the plaza Act 51 match requirements.
- Act 51 calculation will be done at the conclusion of the final design phase.
- Phil Pavlov stated Act 51 is also a concern for the DRIC project and suggested that discussions begin now. The city said they would strongly support such legislation.
- The city stated their desire to be held harmless from Act 51 requirements based on the city's conditional approval on the approach presented by MDOT.

3. Emergency Services:

- \$300,000 is earmarked and will be adjusted for inflation by tying the annual payment to the Consumer Price Index or some similar inflationary index. After 10 years, MDOT will use historical data to negotiate the next agreement. Details of this payment and the index to be utilized will be developed in a separate Memorandum of Agreement.

Other Minor Issues

4. Maintenance of Traffic (MOT):

- The city is reviewing the MOT plan:
 - Bob Clegg said the utility relocation has to happen in early phases
 - The city requested better looking fences to be used for storage areas so residents don't have to look at debris etc. The city isn't insisting on fencing the entire construction area
 - The city wants to discuss the wording of commitments and get rid of wording such as preliminary concept, may be, etc.
 - City wants to maintain business access – wants language in the FEIS
- Paul McAllister said there will be controlled access to plaza property during construction and workers will go through a secure area.
- Karl T. would like to continue these meetings during the project at milestone points so they are part of the decisions, etc. They don't want any surprises. Mark Sweeney said that he intends on holding monthly meetings during the design phase and Matt W. referred everyone to item #5 of the attachment.
- Shaun is concerned that when a contractor gets involved, there could be a time or money saver proposed that could change the scheme significantly.

5. Economic Development Study RFP:

- Matt W. will work with Doug, Kim and Bill to develop an RFP for review in December and interviews to follow the first part of 2009. Only one or two MDOT people will be involved and the rest will be city and county staff.
- Karl T. said the selected firm needs to produce something more than a document for the shelf and needs to find enhancements that are agreeable to the city/county.
- Karl T. wants the consultant with a proven record that can identify niches and has the "why" behind the recommendations.

FEIS update:

- MDOT communications preparing roll out strategy for FEIS.
- Draft FEIS comments are due mid-December, then it will be submitted for legal review.
- Matt Webb offered to come back and present the FEIS to the group when it is released in Mid-January. The city suggested MDOT make a presentation like they did before to the council. City Council Meetings are the 12th and 26th of January. MDOT and the city will meet when FEIS is released.

Action Items requested from the group:

- Matt W. said MDOT wants from the city/county/township a resolution of support approving the vacation of the affected streets.
- City/County/Township will provide resolutions of support during the FEIS comment period.

Additional comments:

- Bob C. has a model of their existing water system. BWB Plaza will disrupt the loop (grid). Bob wants assurance that there won't be an interruption in the system.
- Mark S. stated that in two years they will have a good idea on the final ROW footprint and won't have started with facilities.
- The first Aesthetic Design Guide Meeting is planned for December 4th. A four-hour block of time will be set aside for the meeting.

The meeting was adjourned.

Blue Water Bridge
EIS Plaza Study
PEM Team Meeting Sign-in Sheet
November 20, 2008

Name:	Organization Representing:	Phone Number:	E-Mail:	sign in by placing an "X"
Clegg, Robert	City of Port Huron	810-984-9730	cleggr@porthuron.org	X
Cutler, Randy	Citizen First/Bridge Coalition	810-985-0444	rcutler@cfsbank.com	
Czernel, Karen	Office of Candice Miller	586-997-5010	Karen.czernel@mail.house.gov	X
Davis, Todd	Wilbur Smith Associates	517-323-0500	tdavis@wilbursmith.com	
Funk, Robert	Chase/Bridge Coalition	810-989-3853	robert.j.funk@chase.com	
Groden, Shaun	St. Clair County	810-989-6900	sgroden@stclaircounty.org	✓
Gumbleton, Tomiko	Office of Senator Debbie Stabenow	313-961-4330	Tomiko_gumbleton@stabenow.senate.gov	
Harmer, Kim	City of Port Huron - Planning	810-984-9735	harmerk@porthuron.org	X
Holcomb, Sheryl	MDOT - Planning	517-335-4206	holcombs@michigan.gov	X
Irwin, Andy	MDOT - Planning	517-335-2935	irwina@michigan.gov	X
Jay, Tom	MDOT - Real Estate	248-483-5168	jayt@michigan.gov	
Kauffman, Bill	St. Clair County - Planning	810-989-6950	bkauffman@stclaircounty.org	X
Lewandowski, Robert	Port Huron Township	810-985-7765	rglewandowski@advnet.net	X
McAllister, Paul	MDOT- Environmental	517-335-2622	mcallisterp@michigan.gov	X
Richardson, Megan	Office of Representative Phil Pavlov	517-373-1790	mrichardson@house.mi.gov	
Rizzo, Ryan	FHWA	517-702-1833	ryan.rizzo@fhwa.dot.gov	
Selva, Vicki	Office of Senator Carl Levin	586-573-9145	vicki_selva@levin.senate.gov	
Sharp, Jim	General Services Administration	312-353-5601	Jim.sharp@gsa.gov	
Smith, Art	Community Coalition	810-985-4351	acs4476@comcast.net	X
Sweeney, Mark	MDOT- Design	248-483-5151	sweeneym@michigan.gov	X
Szuch, Mike	MDOT Blue Water Bridge	810-984-3131	szuchm@michigan.gov	X
Tomion, Karl	City of Port Huron	810-300-8118	kartomion@comcast.net	X
Turnbull, Kristen	Office of Representative Phil Pavlov	517-373-1915	kturnbull@house.mi.gov	
Webb, Matt	MDOT - Planning	517-335-4627	webbma@michigan.gov	X
Wending, Matt	Wilbur Smith Associates	517-323-0500	mwending@wilbursmith.com	✓
Whitely, Sheldon	CBP - Indianapolis	317-614-4927	Sheldon.Whitely@dhs.gov	
Wresinski, David	MDOT - Planning	517-373-8258	wresinskid@michigan.gov	
Young, Larry	MDOT - Port Huron TSC	810-985-5011	youngl@michigan.gov	✓

Blue Water Bridge EIS Plaza Study PEM Team Meeting Sign-in Sheet
November 20, 2008

GUESTS

[illegible]

BWB PE/M Group

DRAFT - Identification of Core Enhancement - Mitigation Priorities

E/M = Enhancement or Mitigation

Documented Areas of Concern/ Impact

Local Access & Circulation	E/M Measures Proposed	Estimated Mitigation Cost	Lost Tax Base	E/M Measures Proposed	Estimated Cost	Real Estate Process & Commercial/ Business Impacts	E/M Measures Proposed	Estimated Cost
Provide full access from I-94 to Lapeer Road area for increased emergency service response and economic development	Reconstruct Lapeer Connector interchange to provide both EB to SB and NB to WB movement	\$4,400,000	Provide permanent source of funding to local communities that will be hosting and providing services, as well as losing tax revenues	A permanent source of funding is being proposed for emergency services provided by the city of Port Huron and Port Huron Township on the plaza.	Accounted for within the emergency services column	E/M measures to assure all eligible individuals are advised of their rights and process	MDOT uses personal contact along with detailed booklets, to give eligible individuals an overview of the process. MDOT has also held office hours twice a month to answer property questions.	\$0, accounted for as part of overall project cost
Realign relocated Pine Grove Avenue to assure access is maintained to businesses located along existing Pine Grove Avenue	Relocate Pine Grove Avenue to create a one-way pair north of Hancock Street. Requires additional infrastructure upgrades and ROW	2,800,000	Formation of Payment in Lieu of Taxes (PILOT) be formed.	MDOT is opposed to the development of a PILOT program. As stated above, MDOT will provide payment for services provided by the respective agencies.	Accounted for within other categories.	What steps will MDOT take to ensure that families and business that must be relocated will relocate within Port Huron city limits?	MDOT follows State and Federal Guidelines, which allows for owner flexibility in the relocation process.	\$0, accounted for as part of overall project cost
Formalize a bypass around the plaza connecting the community of Wadham's with Keewahdin and M-25	Request not a direct/indirect impact of the project nor does it meet the purpose and need for the plaza project.	\$0	Revenues from increasing bridge crossing tolls be directed to city of Port Huron, County of St. Clair, and local school districts	Revenues from tolls collected at the BWB bridge are restricted to transportation and maintenance purposes only per MDOT's toll authority agreement. Some BWB funding will be used initially to implement eligible mitigation/enhancement measures and strategies outlined within this spreadsheet	Accounted for within other categories.	What steps will MDOT take (working with other state and local agencies) to ensure relocated families and businesses are able to easily relocate to homes and businesses that are equal to or better than their current setting?	All benefits will be explained to both owners and tenants, who are then responsible to make the final decision.	\$0, accounted for as part of overall project cost
Fund and assist with developing and implementing an access management plan along M-25 between downtown Port Huron and Metcalf Road.	Access Management plan has already been developed for the M-25 corridor. MDOT will coordinate with the city during the design phase to assure new access to businesses along relocated Pine Grove is consistent with plan. MDOT is also committed to working with its local partners to strengthen the provisions of this plan if needed.	\$0				E/M measures incorporated into the FEIS that assure there is adequate residential and commercial property available to impacted property owners.	Standard policies and practices require this on every project and, typically, owners are not required to relocate until they have obtained a suitable replacement location.	\$0, accounted for as part of overall project cost
Formalize the signed M-25 alternate route and work with appropriate local agency to develop the resources necessary for long-term maintenance	Request not a direct/indirect impact of the project nor does it meet the purpose and need for the plaza project.	\$0				How will the city of Port Huron be compensated for the public rights of way taken for this project?	Typically, compensation is provided for property owned in fee. (see plat dedication)	Not applicable if not owned in fee, otherwise all property owners will receive fair market value for their land.
Synchronization of M-25 traffic signals from I-94 BL at Oak to Metcalf Road.	A traffic signal optimization report was completed in February 2006. MDOT implemented several signal retimings. MDOT commits to completing a similar study once the project has been constructed to determine if necessary signal timing changes need to be made along M-25.	\$150,000				E/M that address relocation difficulties anticipated for specialized businesses within the footprint	MDOT makes a good faith offer to both owners and tenants, who are then free to choose their replacement location. Relocation advisory services are likewise extended to both parties.	\$0, accounted for as part of overall project cost
Widen M-25 from plaza north to Kraft Road including widening the bridge over the Black River Canal to accommodate one additional lane in both directions	MDOT believes this improvement would have substantial economic impacts on the businesses along M-25. Additionally this proposed mitigation strategy does not address a direct/indirect impact nor does it meet the purpose and need for the plaza project.	\$0				Commitment in the FEIS that any excess land be gifted to the city of Port Huron for redevelopment	Excess land (if any) will be inventoried and sold approximately 3 yrs after construction has been completed, per MDOT/FHWA processes.	Not applicable
Consider the development of a water ferry system to move people up and down the St. Clair and Black Rivers	MDOT questions how this strategy is related to the plaza expansion project. No mitigation/enhancement strategies are proposed.	\$0						
E/M measures which provide increased recreational access to the Black River	MDOT believes the proposed corridor improvements will improve local access to the Black River.	Accounted for above and within non-motorized category.						
Develop coordination plan with local transit providers including BWATC	MDOT will coordinate with community stakeholders during the design and construction phases of this project to assure impacts on local services are minimized to the greatest extent possible. Specifically, MDOT will coordinate with BWATC and SCCTS regarding Maintenance of Traffic concerns which affect their daily operations.	\$0 (b)						
Total		\$7,350,000			\$0			\$0

BWB PE/M Group

DRAFT - Identification of Core Enhancement - Mitigation Priorities

E/M = Enhancement or Mitigation

Documented Areas of Concern/ Impact

Non-motorized Circulation & Access	E/M Measures Proposed	Estimated Mitigation Cost	CSS & Aesthetic Commitments	E/M Measures Proposed	Estimated Cost	Economic & Community Development	E/M Measures Proposed	Estimated Mitigation Cost
Provide for a non-motorized crossing of the Black River and connect to Port Huron Township Park # 1 and Edison Parkway	MDOT commits to constructing a 14' non-motorized crossing on the south-side of the bridge. N-S connections will also be provided across the Water Street bridge.	\$3,000,000	Final EIS needs to contain specific commitments regarding CSS and aesthetics. Should be guaranteed within the Green Sheet. There needs to be an architectural WOW!	Fund the development of an Aesthetic Design Guide. Use the CSS process to work with local community advisory committee to develop and document architectural & aesthetic enhancements which will be refined during the design phase.	\$300,000	Fund the development of a world class visionary economic development plan	Retain WSA Economic Development Specialist Melissa Zeigler to lead community through development of Plaza Redevelopment Plan	\$220,000
E/M measures that replace and enhance pedestrian access along north/south corridors adjacent to the plaza	MDOT has already incorporated sidewalks along relocated Pine Grove Avenue, 10th Street and Hancock Streets as part of the standard project cost.	\$0 additional funds are needed for this strategy.	Ensure view sheds, historical entities, and cultural resources are protected	The E.C. Williams house is the only historic structure eligible for listing on the National Register of Historic Places. MDOT will relocate the house if necessary. A new historic marker will be placed at the relocated site.	\$0, accounted for in overall project cost	E/M measures that provide incentives to stimulate and establish an environment that is supportive of businesses	Fund economic development position/consulting services for the city of Port Huron (through 2019)	\$1,000,000
E/M measures that provide improved east/west pedestrian access to the St. Clair waterfront	MDOT will support the submittal of a local enhancement grant to fund the proposed connection from 10th Street to St. Clair Parkway system	\$500,000 (c)	How will community character be developed or discovered by MDOT	Fund the development of a CSS Design Guide. Work with local CSS community advisory committee to develop aesthetic enhancements which will reflect community character.	Accounted for above	Funding to assist in marketing the area through the local tourism bureau	See Redevelopment Plan and funding of economic development services	Accounted for above
			Specific actions to mitigate adverse impacts on visual character of the plaza, surrounding neighborhood, overall character of the city	Fund the development of an Aesthetic Design Guide. Use the CSS process to work with local community advisory committee to develop and document architectural & aesthetic enhancements which will be refined during the design phase.	Accounted for above	E/M measures to address changes/update local planning and zoning ordinances as a result of the plaza	As part of redevelopment plan, work with city of Port Huron to develop an overlay zone which promotes flexible design standards. Fund changes to city master plan/zoning ordinance	\$50,000
			How will properties currently within sight of the plaza be protected using design elements	Fund the development of an Aesthetic Design Guide. Use the CSS process to work with local community advisory committee to develop and document architectural & aesthetic enhancements which will be refined during the design phase.	Accounted for above	E/M that provide the city of Port Huron with staffing and budget resources to help develop and implement a redevelopment plan	Fund economic development position/experts for the city of Port Huron (through 2019)	Accounted for above
			Create a facility that projects Michigan and the region's heritage, not a "check-point", warehouse, storage yard, or industrial facility	Fund the development of an Aesthetic Design Guide. MDOT and GSA commit to work with local CSS community advisory committee to develop a plaza design which reflects the region's heritage.	Accounted for above	Relocate welcome center to median of I-69/I-94 to provide increased access to local tourism information	(a) Working with the Greater Port Huron Chamber of Commerce, fund a portion of the construction costs for a local visitor center addition as part of relocated chamber offices along Pine Grove Avenue	\$300,000
			Accommodations for the design and construction of innovative sound walls. Can berms and trees be utilized as natural sound barriers?	Fund the development of an Aesthetic Design Guide. Berms and trees will not be utilized around the plaza as there is not enough ROW to create effective sound barriers. Berms are being proposed around the welcome center to help buffer the adjacent properties.	Accounted for above	Develop a local tourism facility adjacent to the plaza. Include significant signage to said facility	See Above. Also develop and install a local wayfinding program for key local tourism destinations.	\$100,000
			Mitigation measures for stormwater detention basins which incorporate aesthetic opportunities	MDOT will coordinate with the city of Port Huron and St. Clair County regarding the design of detention basins.	\$0, accounted for in overall project cost	Have the Community Assistance Team (CAT) meet with each of the affected communities to provide various tools and incentives	Continue to coordinate with CAT and bring other state/federal agencies and resources to the community.	\$0 from MDOT however other state or federal agencies may bring resources to the community
			Mitigation measures to assure native plant species will be incorporated into landscaping areas of the project	Fund the development of an Aesthetic Design Guide. Work with local CSS community advisory committee to develop guidelines for utilizing the appropriate plant species to develop sustainable landscapes.	Accounted for above			
			How will public input be provided for remediation recommendations for contaminated materials/sites?	MDOT will follow all applicable state and federal laws for the remediation of contaminated materials/soils.	\$0, accounted for in overall project cost			
		\$3,500,000			\$300,000			\$1,670,000

BWB PE/M Group

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[illegible]

BWB PE/M Group

DRAFT - Identification of Core Enhancement - Mitigation Priorities

E/M = Enhancement or Mitigation

Documented Areas of Concern/ Impact	Construction Related Impacts	E/M Measures Proposed	Estimated Cost	Other	E/M Measures Proposed	Estimated Cost	Total Estimated Mitigation Cost
	Mitigation measures to ensure business operations will not be adversely impacted	As part of MDOT's maintenance of traffic planning efforts all efforts will be taken to minimize access disruptions to local businesses. MDOT will work closely with the city of Port Huron and the St. Clair County Road Commission to finalize these plans during the design phase.	\$0, accounted for as part of overall project cost	Assurances that Act 51 Match will be minimal to the city of Port Huron	MDOT will continue to coordinate with the city of Port Huron during the design and financial planning phases of the project. MDOT will strive to minimize the Act 51 impacts on the city of Port Huron to the greatest extent possible.	\$0, accounted for as part of overall project cost	
	Mitigation measures to minimize impacts of noise to surrounding residents and businesses	Section 5.6 of the DEIS documents MDOT's best practices for minimizing noise impacts during construction. Construction activities will be limited to dawn to dusk, unless the city/township requests changes to this policy to expedite construction duration periods.	\$0, accounted for as part of overall project cost	Address the "isolation impacts" on the residential and business parcels south of the revised plaza footprint and along Scott Avenue.	Based on additional engineering analysis, MDOT has determined the residential and business parcels in the area between relocated Pine Grove Avenue and the new southern boundary of the plaza are eligible to be considered a relocation. The residential properties along Scott Ave. do not encounter the same type of isolation impacts and thus are not eligible.	\$0, accounted for as part of overall project cost	
	E/M measures to reduce particulate matter 2.5 during construction	Section 5.4 of the DEIS documents MDOT's best practices for minimizing air pollution and particulate matter during construction.	\$0, accounted for as part of overall project cost	Reimbursement for the infrastructure improvements required by state mandate for the city's Combined Sewer Overflow (CSO) project within the limits of the plaza footprint.	MDOT will compensate the city of Port Huron for the costs associated with those CSO infrastructure upgrades that will be abandoned by the plaza project.	Cost sharing agreement will be negotiated during the design phase of the project (similar to a utility relocation payment).	
	Measures to control nuisance odors and unnecessary air pollution associated with diesel emissions	Section 5.4 of the DEIS documents MDOT's best practices for minimizing air pollution and particulate matter during construction.	\$0, accounted for as part of overall project cost				
	Assurances that committed mitigation measures are being followed, and local office to respond to complaints	Mitigation contained within the Final EIS and Record of Decision is a binding commitment that MDOT must follow during the implementation phases of this project. The local office responsible for construction oversight, schedule questions, and project complaints will be the Port Huron TSC.	\$0, accounted for as part of overall project cost				
	Mitigation measures to ensure that increased traffic congestion during construction does not degrade air quality	As part of MDOT's maintenance of traffic planning efforts all efforts will be taken to minimize traffic delays. MDOT's Work Zone Mobility Policy will be followed to minimize congestion within work zones. MDOT will work closely with the city of Port Huron and St. Clair County Road Commission to finalize these plans during the design phase.	\$0, accounted for as part of overall project cost				
	Basement surveys should be honored by MDOT to be prone to construction-related vibration damage	Contingent upon property owner approval, MDOT in consultation with the selected construction contractor will make an assessment as to which structures will have a basement surveys completed. MDOT's contractor will be responsible for the costs associated with the required basement surveys. These surveys will be completed at the on-set of the construction phase.	\$0, accounted for as part of overall project cost				
	Will native plant seed be utilized to stabilize impacted areas?	As part of the development of the Aesthetic Design Guide, MDOT will work the local community advisory committee to develop guidelines for utilizing native plant species into landscaping plans.	\$0, accounted for as part of overall project cost				
	Mitigation measures to ensure sufficient emergency access during construction (north to south access is critical)	As part of MDOT's maintenance of traffic planning efforts all efforts will be taken to minimize impacts to critical north-south routes and emergency service access. MDOT will work closely with the emergency responders to finalize these plans during the design phase.	\$0, accounted for as part of overall project cost				
			\$0			\$0	\$13,128,500

Notes:

02/21/2008: Initial mitigation measures used as a starting point were developed from the comments received on the Fall 2007 BWB DEIS.

02/21/2008: For this effort there are several factors/comments that were received during the DEIS comment period that are currently being evaluated by the BWB EIS Team. This analysis and the comments are being responded to outside of this team. Several of these comments will likely impact the development of the final proposed Enhancement/Mitigation (E/M) measures. The following areas are examples of analysis that is being completed outside of this team:

- Justification of the plaza size/reduction of the plaza footprint
- Existing and anticipated cross-border delay traffic analysis
- Maintenance of traffic plans
- Future CBP Operations Commitments

In several instances, the ability to finalize the mitigation/enhancement package will depend on the outcome of the aforementioned analysis. Once completed, the outcomes of this analysis will be presented to the PEM Team for consideration during the development of the Project Enhancement and Mitigation package.

03/20/08: (a) Building to be provided by Port Huron Chamber of Commerce. Space would include retail floor space for limited Blue Water merchandise, a small high-tech area for laptop and terminal use and kiosk for virtual community tours , and conference room space for international business meetings and training. To be staffed by Port Huron Chamber of Commerce

04/17/08: (b) MDOT will finalize its detailed Maintenance of Traffic Plans during the design phase/early stages of construction. At that time, opportunities may be identified to run specialized transit routes to minimize delays during construction. If it is determined during the design phase that additional transit service could decrease work zone mobility issues, funding would be provided at that time. (c) MDOT will support a local enhancement grant application to provide the necessary connections to the Thomas Edison Parkway as identified by the community plan prepared in 2007 by St. Clair County Parks and Recreation/Norm Cox. A 20% match of local funds will be required.

6/12/08: (c) MDOT will provide annual payments to the city of Port Huron for emergency responder service, assuming the city retains the primary responsibility for providing first responder emergency services. MDOT commits to provide the Charter Township of Port Huron annual payments for secondary emergency responder services, assuming Port Huron Township retains the secondary responsibility for providing back-up emergency services on the plaza.

Dollar Value of Additional Proposed Mitigation/Enhancements Above MDOT's Standard

(i.e., wetland mitigation, stormwater detention, relocation assistance, etc.)

Mitigation Costs: \$13,128,500

Percentage of Construction Costs: 7.29% *

* Note this percentage estimate does not account for aesthetic enhancements added during the design and construction phase which will be outcomes of the CSS Design Guide. It also only accounts for one year of payments to the city of Port Huron and Port Huron Township for providing emergency services to the expanded plaza.



U.S. Department
of Transportation
**Federal Highway
Administration**

Michigan Division

315 W. Allegan, Room 201
Lansing, Michigan 48933

February 20, 2009

Ms. Susan P. Mortel, Director
Bureau of Transportation Planning (B340)
Michigan Department of Transportation
Lansing, Michigan

Dear Ms. Mortel:

The Federal Transit Administration and Federal Highway Administration have jointly reviewed the Southeast Michigan Council of Governments (SEMCOG) 2030 Regional Transportation Plan (RTP) amendment submitted by your letter of January 12, 2009. Our review compared the amended plan with the requirements of 49 USC 1607, 23 USC 134, the Clean Air Act Amendments of 1990 (CAAA), and the regulations issued in connection with each Act. The air quality conformity portion of our review was coordinated with the Environmental Protection Agency (EPA).

We find that the SEMCOG 2030 RTP as amended is in conformance with the transportation related requirements of the 1990 CAAA and the regulations for determining conformity of transportation plans and programs to State Implementation Plans (SIP) for air quality as contained in 40 CFR Part 93. A new conformity finding will be required if the plan is modified by adding or deleting non-exempt projects, or if any of the triggering events specified in 40 CFR 93.104 occur.

If there are any questions concerning our action on this plan, please contact Jim Cramer, at (517) 702-1827 or Stewart McKenzie at (312) 353-2866.

Sincerely,

Original signed by:

James R. Cramer
Transportation Planning Engineer

For: James J. Steele
Division Administrator

Doc# 99825



Glenn H. Wittman/5PM/R05/GSA/GOV
01/05/2009 05:09 PM

To
Jim L. Sharp Jr/5PB/R05/GSA/GOV@GSA
cc
Michele A. Sharples/5PB/R05/GSA/GOV@GSA, John R.
Caswell/5PM/R05/GSA/GOV@GSA
Subject
Re: Fw: BWB FEIS Comments

Jim,

I have reviewed the FEIS (Draft Nov 19, 2008) prepared by MDOT and have not identified any errors or omissions from GSA's NEPA perspective, which is that of a cooperating agency. I do note that the FEIS has been revised from the earlier DEIS, based on a new or updated Program of Requirements, and focuses on specific changes to the project since public review of the DEIS. Provided that mitigation measures are carried out as summarized in the "green sheet" and in chapter 5, there should be no lasting, significant, adverse effects on the human environment from the Recommended Alternative as described.

I do advise, however, that we (GSA) perform our own focused NEPA analysis that addresses any issues or concerns related to GSA leasing and operation activities at the new plaza prior to final design and construction of the selected alternative. This could be in the form of a properly completed detailed CATEX Checklist or a brief EA.

.....
GLENN H. WITTMAN
NEPA Program Coordinator/REQA
Architecture & Engineering Programs Division

GSA Public Buildings Service
Great Lakes Region (5)
230 S. Dearborn St., Rm. 3600
Chicago, Illinois 60604

O: 312.353.6871
C: 312.914.5631
F: 312.353.1304



DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
REGULATORY OFFICE
PO BOX 1027
DETROIT, MI 48231-1027

December 22, 2008

Engineering & Technical Services
Regulatory Office
File No. LRE-1993-120621

Matt Webb
Michigan Department of Transportation
425 West Ottawa Street
Lansing, MI 48933

Dear Mr. Webb:

We have reviewed your letter and your Pre-Final EIS dated November 19, 2008 (copy enclosed) for the Blue Water Bridge Plaza Study in St. Clair County, Michigan.

You have selected your preferred alternative that will have impacts on wetlands that lie under Corps jurisdiction and stated that you will create wetlands to mitigate for those impacts.

We reiterate that a Department of the Army Permit will be required prior to initiating work in wetlands. A Compensatory Mitigation Plan detailing the nature of the wetlands to be created or restored should be submitted with the permit application. Reference our previous response letters dated January 27, 2006 and September 27, 2007 (copies enclosed).

Our permit evaluation will begin only after the receipt of a completed permit application form. To expedite evaluation of your proposal we encourage you to submit a permit application with appropriate drawings and mitigation plan as soon as that information becomes available.

Your response and any questions should be directed to Patrick O'Connor at the above address or telephone 313.226.1328 or E-Mail patrick.s.oconnor@us.army.mil. Please refer to File No. LRE-1993-120621 in all future communications with this office.

Sincerely,

John Konik
Chief, Regulatory Office
Engineering and Technical Services

Copy Furnished

David Wresinski w/ encl
Abdelmoez Abdalla w/ encl

12/10/2007 MON 17:40 FAX



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 10 2007

REPLY TO THE ATTENTION OF

B-19J

David W. Wresinski, Administrator
Project Planning Division
Bureau of Transportation Planning
Michigan Department of Transportation
Murray D. Van Wagoner Building
P.O. Box 30050
Lansing, Michigan 48909

Re: Comments on the Draft Environmental Impact Statement for the Blue Water Bridge
Plaza Study, St. Clair County, Michigan - EIS No. 20070388

Dear Mr. Wresinski:

The U.S. Environmental Protection Agency Region 5 (U.S. EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza (Plaza) Study located in St. Clair County, Michigan. Our comments in this letter are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

A DEIS for the Study was prepared by the Michigan Department of Transportation (MDOT) in cooperation with the Federal Highway Administration with the goal of developing a 2030 plan for improvements at the Plaza and the I-94/I-69 Corridor (Corridor). Reasons stated for improvement to the Plaza and the Corridor including the following:

- ♦ Improve safety on the Bridge, at the Plaza, and on the Corridor;
- ♦ Minimize backups on Highway 402 in Canada and on the Corridor;
- ♦ Reduce vehicle and pedestrian conflicts on the Plaza and along the Corridor;
- ♦ Accommodate projected 2030 traffic growth and potential future facility needs;
- ♦ Accommodate latest Customs and Border Protection inspection technologies and procedures;
- ♦ Provide flexibility to accommodate future unknown inspection technologies and procedures;
- ♦ Improve security at the Plaza;
- ♦ Improve access between the Plaza and the Port Huron area; and
- ♦ Create a more visible and accessible Welcome Center.

The Draft EIS evaluates four alternatives:

No Build Alternative - The No Build Alternative would not involve any changes to the existing Plaza configuration or ramps, nor would it involve any improvements to the Black River Bridge or the Corridor. However, continued maintenance and technology improvements would continue as space allows.

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P.2/4

TO:517 373 9255

312 353 5374

DEC-10-2007 16:21 FROM:US EPA REGION 5

- City East Alternative - The City East Alternative expands the existing plaza within the City of Port Huron. This alternative would relocate Pine Grove Avenue to the east around the expanded Plaza.
- City West Alternative - The City West Alternative expands the existing plaza within the City of Port Huron. This alternative is similar to the City East Alternative, except that Pine Grove Avenue would be relocated to the west around the expanded Plaza.
- Township Alternative - The Township Alternative involves the relocation of major Plaza functions to a mostly undeveloped site in Port Huron Township, 1.5 miles west of the current Plaza via a six-lane, secure roadway running between the existing Plaza and the new site.

The City West Alternative was identified as the Preferred Alternative in the DEIS.

The DEIS adequately conveys the process by which alternatives were developed, evaluated, and either dismissed or selected. It also explains the Plaza facilities/security design criteria used to select the Preferred Alternative. The Preferred Alternative fulfills the reasons stated in the DEIS for improving the Plaza.

Based on our review of the DEIS, the U.S. EPA has rated the Draft EIS as "Environmental Concerns-Insufficient Information." This rating will be published in the Federal Register. A copy of our rating definitions is enclosed. We recommend the final EIS address the following issues.

Air Quality

We have participated in discussions with FHWA and MDOT during development of the DEIS and appreciate the efforts of both agencies to address our concerns concerning air impacts. We have reviewed the discussion concerning air impacts included in the DEIS, and offer the following comment.

During these discussions, we have expressed disagreement with the following statement found in Section 3.9.4 - What Impacts from Mobile Source Air Toxics (MSAT) are Anticipated with the Project's Alternatives? (page 3.9-11):

"Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable quantitative estimates of MSAT emissions at the project level."

We continue to request that this statement be stricken from the EIS. We believe this statement is not consistent with current academic literature and other published guidance.

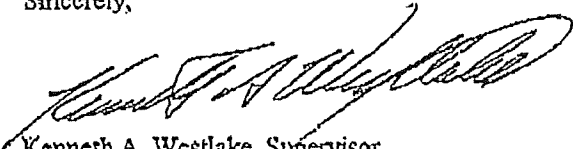
Green Building Design

A recent General Services Administration DEIS for the new U.S. Border Station and Commercial Port of Entry in Derby Line, Vermont, included commitments to design the project to incorporate elements of sustainable design and to certify buildings through the Leadership in Energy and Environmental Design (LEED) program. LEED is the nationally-accepted benchmark for the design, construction, and operation of high-performance green buildings intended to maximize operational efficiency while minimizing environmental impacts.

We encourage the FHWA and MDOT to commit to creating a sustainable building implementation plan for the Blue Water Bridge Plaza. Such a plan could incorporate the use of recycled materials, natural light, passive solar heating, energy efficient lighting, water conserving plumbing, innovative stormwater management, and Energy Star equipment. For additional information regarding the LEED program, please access the following website: <http://www.usgbo.org/DisplayPage.aspx?CategoryID=19>. We are also available to assist the FHWA and MDOT in this effort.

In summary, we request the FHWA and MDOT revise the EIS by deleting the statement concerning emissions and dispersion modeling and committing to creating and implementing a sustainable building implementation plan for the Plaza. We are available to discuss these comments, and we look forward to receiving the Final EIS when it becomes available. Should you have any questions, please do not hesitate to contact Kathleen Kowal of my staff at (312) 353-5206 or via email at kowal.kathleen@epa.gov.

Sincerely,



Kenneth A. Westlake, Supervisor
NEPA Implementation
Office of Enforcement and Compliance Assurance

Enclosure - Summary of Rating Definitions

Vance, Rhonda K.

From: jim.sharp@gsa.gov
 Sent: Monday, December 10, 2007 3:00 PM
 To: WebbMa@michigan.gov
 Cc: dana.pionke-garcia@gsa.gov
 Subject: Fw: DEIS comments for Port Huron

Attached please find GSA's comments on the DEIS for Port Huron.

Jim Sharp



U.S. General Services Administration

Realty Specialist/Project Manager
 Office of Border Stations

(Ofc) 312-353-5601
 (Fax) 312-353-7387

=====

I have reviewed the Blue Water Bridge Plaza Study DEIS (signed August 10, 2007) and have the following comments:

- 1) The narrative on the DEIS cover/signature page states: "The City West Alternative has been identified as the Preferred Alternative in this document. Important issues and concerns related to the effects of the Practical Alternatives on the ... environment include neighborhood and community cohesion, visual character, noise, air quality, and land use patterns." Yet visual character, air quality, and land use are not included in the Summary of Impacts table for the four alternatives. The table should be revised to include all potentially significant impacts.
- 2) The figures in Appendix E are generally good and show relevant information, **however** the Legend box on Figures E.3 - E.14 and E.18 - E.19 should be revised and expanded to show **all** the graphic symbols and colors (lines, dots, cross-hatch patterns, colors and shadings, etc.) depicted on the figures themselves. Currently, the information depicted on these figures is incomplete or ambiguous. It is hard to read the labels through the darker colors (reds and blues) in particular.
- 3) Given the amount of apparent "public controversy" (i.e., political and community concerns) involving the project (based on the February 5 and 27, 2007, letters to Governor Granholm from the City of Port Huron and Senator Levin, respectively), following the NEPA process to the strict letter of the law is essential for public acceptance and buy-in to the final selected alternative whether City West, City East, or the Township.
- 4) The Project Mitigation Summary ("Green Sheet") at the end of Chapter 5 could be a very useful tool in addressing and allaying public concerns about unavoidable impacts (especially adverse or detrimental ones) resulting from the project. Every effort should be made to ensure that this summary is as complete and up-to-date as possible.

12/24/2007

Thank you for the opportunity to review and comment on this EIS.

.....
Glenn H. Wittman
Regional NEPA Coordinator/REQA
Architecture & Engineering Programs Division

GSA Public Buildings Service
Great Lakes Region
230 S. Dearborn Street, Suite 3600
Chicago, IL 60604
tel 312.353.6871 fax 312.353.1304
cell 312.914.5631

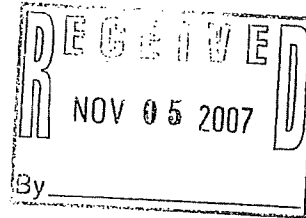
12/24/2007



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
National Geodetic Survey
Silver Spring, Maryland 20910-3282

October 31, 2007

Mr. Bob Parsons
Public Hearings Officer
Michigan Department of Transportation
P.O. Box 30050
Lansing, Michigan 48909



Dear Mr. Parsons,

We have provided comments on the DEIS regarding the Blue Water Bridge Plaza Study & Improve the I-94/1-69 Corridor, To Provide Safe, Efficient & Secure Movement of People & Goods across the Canadian-US Border, Pt Huron Area, St Clair Co, MI (20070388).

The DEIS has been reviewed within the areas of the National Oceanic and Atmospheric Administration, National Geodetic Survey's (NGS) geodetic responsibility, expertise, and in terms of the impact of the proposed actions on NGS activities and projects.

If there are any planned activities which will disturb or destroy geodetic control monuments, NGS requires notification not less than 90 days in advance of such activities in order to plan for their relocation. NGS recommends that funding for this project includes the cost of any required relocation(s).

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the homepage of NGS at the following Internet address: <http://www.ngs.noaa.gov>. After entering this website, please access the topic "Products and Services" then "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the NGS database for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

We hope our comments will assist you. Thank you for giving NGS the opportunity to review your DEIS.

Sincerely,

Christopher W. Harm
Program Analyst
NOAA's National Geodetic Survey
Office of the Director
1315 East-West Highway
SSMC3 8729, NOAA, N/NGS
Silver Spring, Maryland 20910



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United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

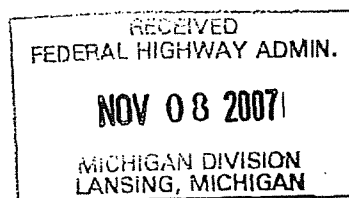


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PEP/NRM

ER 07/754

Mr. James J. Steele
Division Administrator
Federal Highway Administration
315 West Allegan Street, Room 201
Lansing, Michigan 48933



Dear Mr. Steele:

As requested, the Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (EIS) and Draft Section 4(f) Evaluation for the **Blue Water Bridge Plaza Study, St. Clair County, Michigan**. The Department offers the following comments and recommendations for your consideration.

General Comments

The draft EIS provides a comparison between the no-build alternative and three practical alternatives to expand the international Blue Water Bridge Plaza, as well as make improvements to the I-94/I-69 Corridor and Black River Bridge. In 2006, the Federal Highway Administration (FHWA) and Michigan Department of Transportation (MDOT) split the Blue Water Bridge Plaza Study and the I-94/I-69 Corridor and Black River Bridge Study into two separate documents. In a letter dated December 18, 2006, the U.S. Fish and Wildlife Service (FWS) accepted the request from MDOT to become a participating agency on the proposed I-94/I-69 Environmental Assessment (EA) Corridor Study. Since that time, the FHWA and MDOT have combined the EIS for the plaza study with the EA for the corridor study into the current document. This draft EIS identifies the City West Alternative as the preferred alternative.

Section 4(f) Evaluation Comments

The draft Section 4(f) evaluation identified properties in the project study area eligible to be considered under Section 4(f) of the Department of Transportation Act of 1966 (48 U.S.C. 1653(f)). Four properties, Port Huron Township Parks No. 1 and No. 2, Riverside Park, and the E.C. Williams House, were found to be in the project area, but the evaluation determined that only Township Park No. 1 and the E.C. Williams House

would be affected by the project. Approximately a 0.3 acre of land will be permanently required from Port Huron Township Park No. 1 for road reconstruction, approximately 1.2 acres potentially for stormwater diversion, and a temporary easement of 0.1 acre at the park entrance for grading purposes. Township officials have agreed in writing with the *de minimus* findings and proposed mitigation.

The E.C. Williams House has been determined to be eligible for the National Register of Historic Places as an excellent example of an early Queen Anne duplex residence, and because it was associated with E.C. Williams, a prominent local newspaper publisher. The property is also a Registered Michigan Historic Site. The evaluation considered two other action alternatives and the no-action alternative that would have avoided impacts to the property; however, these were determined not to be prudent alternatives. The preferred alternative would result in an adverse effect determination with the Michigan State Historic Preservation Officer (SHPO). The SHPO has agreed in principle with the mitigation provided by FHWA and MDOT, but a memorandum of agreement (MOA) has yet to be executed.

The Department would concur with the FHWA that there appears to be no feasible or prudent alternative to the proposed project, if built as proposed, which would result in the loss of the eligible Section 4(f) property, the E.C. Williams House, or avoid the *de minimus* impacts to Port Huron Township Park No. 1. The Department would also concur that all measures to minimize harm to the property have been employed, under the condition that the mitigation proposed in the draft MOA is agreed to by the Michigan SHPO. A copy of the signed MOA should be attached to the final evaluation.

Specific Comments on the Draft EIS

Section 3.14.3, Will the Project Impact Any Plants, Wildlife, or Threatened and Endangered Species? (pages 3.14-6 to 3.14-9): This section states, "Wildlife species that would be affected are common in the surrounding area, tolerant of noise and visual disturbances, and would easily relocate to similar habitats." This statement would seem to indicate that habitat loss does not affect wildlife. Although suitable habitat may remain in the study area, it is likely occupied by many of the same common wildlife species that would be displaced from impacted areas. There is no information provided in the draft EIS to show that these habitats presently are, or at the time of project construction are likely to be, so far below carrying capacity as to be able to absorb the displaced wildlife, assuming that individuals were able to locate and move to these other suitable habitats. This section should be corrected in the final EIS.

In addition, this section of the draft EIS does not include any discussion of potential effects to migratory birds. The preferred alternative would impact 4.36 acres of wetlands. We expect these wetland areas to provide habitat for a variety of migratory birds. Further, peregrine falcons have nested under the Black River Bridge as recently as 2005. Under the Migratory Bird Treaty Act of 1918, as amended, it is unlawful to take, capture, kill, or possess migratory birds, their nests, eggs, and young. We recommend this section in the final EIS address potential impacts to migratory birds.

Section 5.15, What Will Be Done To Ensure No Migratory Birds Will Be Impacted? (page 5-15): This section addresses mitigation measures for work on bridges over watercourses and indicates that coordination between the MDOT, the Michigan Department of Environmental Quality, and the FWS will occur. We recommend expanding this list to include other Agencies that may have review or permitting authority, for example the U.S. Army Corps of Engineers. We also recommend this section in the final EIS include a discussion of other mitigation measures, such as scheduling construction activities or removing potential habitat before the initiation of spring nesting or after the breeding season has ended to avoid take of migratory birds, eggs, young, and/or active nests. We recommend including these mitigation measures in the Project Mitigation Summary "Green Sheet."

The Department has a continuing interest in working with FHWA and MDOT to ensure impacts to resources of concern to the Department are adequately addressed. For matters related to Section 4(f), please contact Regional Environmental Coordinator Nick Chevance, National Park Service, Midwest Regional Office, 601 Riverfront Drive, Omaha, Nebraska 68102, telephone 402-661-1844. For matters related to fish and wildlife resources, please continue to coordinate with Mr. Craig Czarnecki, Field Supervisor, or Ms. Barbara Hosler, Project Biologist, Ecological Services Field Office, U.S. Fish and Wildlife Service, 2651 Coolidge Road, Suite 101, East Lansing, Michigan 48823-6316, telephone 517-351-2555.

We appreciate the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Willie R. Taylor". The signature is fluid and cursive, with the first name "Willie" being the most prominent.

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc:
Mr. David E. Wresinski, Administrator
Project Planning Division
Michigan Department of Transportation
425 West Ottawa Street
Lansing, Michigan 48909



U.S. Department
of Transportation
**Federal Aviation
Administration**

**Detroit Airports District Office
11677 South Wayne Road
Suite 107
Romulus, MI 48174**

November 5, 2007

David W Wresinski Administrator
Project Planning Division
Bureau of Transportation Planning
Murray D. Wagoner Building
P.O. Box 30050
Lansing MI 48909

Dear Mr. Wresinski:

Blue Water Bridge Plaza Study
St. Clair County, Michigan
Review of Draft Environmental Impact Statement

With respect to your study the Federal Aviation Administration (FAA) has completed its review and has only one comment. If any replacement wetlands are to be located within 10,000' from a public use airport additional coordination with the FAA will be required to ensure that the proposed mitigation site does not adversely impact air safety.

If you have any questions please contact me at (734) 229-2905. We thank you for the opportunity to review this study. We also are impressed by the "reader-friendly" format of the study.

Sincerely,

O/s

Ernest P. Gubry
Environmental Protection Specialist
Detroit Airports District Office

cc: Molly Lamrouex, MDOT/BOA
Ryan Rizzo, FHWA

Ministry of
Transportation

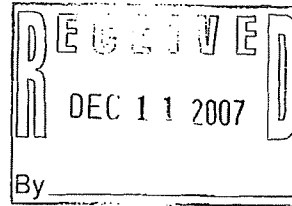
Office of the Regional Director
Southwestern Region

659 Exeter Road
London, Ontario N6E 1L3
Telephone: (519) 873-4333
Facsimile: (519) 873-4236

Ministère des
Transports

Bureau du directeur régional
Région du Sud-Ouest

659, chemin Exeter
London (Ontario) N6E 1L3
Téléphone : (519) 873-4333
Télécopieur : (519) 873-4236



December 10, 2007

Robert H. Parsons
Public Hearing Officer
Project Planning Division
Michigan Department of Transportation
425 W. Ottawa Street
P.O. Box 30050
Lansing, Michigan
48909

Dear Mr. Parsons:

RE: Blue Water Bridge Plaza Study
Draft Environmental Impact Statement

Improving the Blue Water Bridge border crossing is important to Ontario. This crossing is the fourth busiest in the province and carries the second highest volume of commercial traffic between Ontario and the United States. We appreciate the Michigan Department of Transportation including ministry staff on their advisory committee for the Blue Water Bridge Plaza Study and welcome this opportunity to comment.

Customs processing capacity at the current plaza has had and continues to have a significant impact on the operations of Highway 402 within Canada. Passenger car and truck queues form on the westbound lanes of Highway 402 when the arrival rate of U.S.-bound traffic exceeds the processing rate at the Blue Water Bridge Plaza in Port Huron. This has created a number of concerns for the traveling public and the community including:

1. Safety – Traffic queues are a significant safety risk to travelers from three aspects; rear end collisions by high speed traffic approaching the end of a queue, collisions related to lane changes due to the speed differential between lanes and limited visibility created by queued traffic.
2. Access to and from the highway – Queued trucks form a "wall" making it difficult to read signage and enter and exit the highway at the interchanges.
3. Environmental concerns –including air quality and noise concerns as a direct result of the queued traffic.

.../2

In response to these issues, the ministry has implemented a number of measures including:

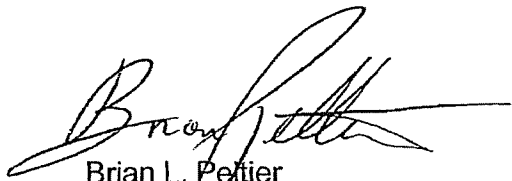
- Constructed a queue warning system on Highway 402 at a cost of \$4.3 million,
- Lowered the speed limit from 100km/h to 80km/h followed by 70 km/h as you approach the border, and
- Added a gate at the Front Street interchange that is closed when there is significant traffic queuing on Highway 402.

In addition, the ministry has completed an Engineering and Environmental Assessment (EA) study to improve safety and traffic flow on Highway 402 approaching the Blue Water Bridge. We are currently working towards obtaining EA clearance to proceed with detail design and construction to widen the highway (4 westbound lanes) and separate cars and trucks as they approach the border.

The above measures are considered as interim steps to manage the queues that form on Highway 402. We feel that the solution is to move toward eliminating the queues on Highway 402 by increasing the processing capacity of the plaza in Port Huron so that the processing rate will more closely align with the arrival rate at the Blue Water Bridge.

We believe that the preferred alternative presented in the DEIS will significantly increase processing capacity at this crossing and result in traffic queues approaching the border being eliminated for all but the highest security conditions. We would encourage the Michigan Department of Transportation to proceed expeditiously with the implementation of the plaza improvements.

Yours truly,



Brian L. Peltier
Regional Director
Southwestern Region



**Blue Water
Bridge Canada**

**Pont Blue
Water Canada**

1 Bridge Street · Point Edward, Ontario Canada · N7V 4J5
Tel: (519) 336-2720 · Fax: (519) 336-7622 · Website: www.bwba.org

Robert Parsons
Public Hearings Officer
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050
Lansing, Michigan 48909

November 9, 2007

Re: Comments on Blue Water Bridge Plaza Draft Environmental Impact Statement

Please be advised that the Blue Water Bridge Authority's name has recently changed to Blue Water Bridge Canada (BWBC) and therefore all future correspondence should reflect this name change.

Blue Water Bridge Canada is pleased to comment on the Blue Water Bridge Plaza Study - St. Clair County, Michigan – Draft Environmental Impact Statement. BWBC has reviewed the draft Environmental Impact Statement documenting the study assessing the purpose and needs to the improvements required on the Blue Water Bridge Plaza for the foreseeable future.

The BWBC agrees with the Study Team's decision that the "No Build" Alternative does not address the primary purpose and needs identified for improvements required to the plaza. The existing US plaza configuration causes fundamental constraints inconsistent with good traffic flow management. Trucks are forced to weave from the right lane leaving Canada to the left lane entering the United States due to the existing location of the US Plaza truck primary inspection booths on the US plaza. After clearing the US primary lanes trucks must return to the right lane exiting the US Plaza. The "No Build" Alternative does not have the infrastructure in place to meet the proposed traffic volumes projected for this border crossing. The "No Build" Alternative also presents challenges for the US in regards to long term maintenance of existing single line ramps and would not include the replacement of the Black River Bridge which is a critical piece of infrastructure for this international crossing.

The "Township" Alternative presents concerns with safety and security in the creation of a dedicated corridor from the bridge to the proposed plaza. One of the concerns would be access for emergency response vehicles in the event of an incident in the corridor as well as the safety of emergency response personnel, truckers or any one else trapped in the corridor at the time of the incident. Similar concerns were identified in the marshalling yard alternative of the Ontario Ministry of Transportation's Environment Study, assessing the Need and Feasibility of widening the Highway 402.

This "Township" alternative also would create problems for cross border users travelling to destinations north of or near the existing plaza reducing the likelihood of short stops at local businesses in the area.

The "City East" Alternative relocates Pine Grove Avenue to 10th Avenue leaving a high traffic volume roadway running underneath the Blue Water Bridge Spans. This alternative is problematic due to the close proximity of the spans to the roadway it leaves the structure vulnerable to a terrorist action.

BWBC and MDOT must make every effort to reduce the risk for potential terrorist action against the structures where ever possible. The BWBC does not support this alternative based on this safety and security concern by itself.

BWBC is supportive of the "City West Alternative" as we believe it best meets the purpose and need of the study.

Improvements to the plaza will increase the competitiveness of U.S. companies trading with Canada. The United States and Canada are each others largest trading partners. 70% of this trade moves by truck. The Blue Water Bridge is the second busiest commercial truck crossing on the Canada U.S. border. 55% of all Canadian exports to the U.S. are bound for manufacturing facilities in the U.S. 25% of trade crossing this port of entry are auto or auto related shipments where just in time inventory is a crucial element in the production process.

The "City West Alternative" will improve border processing and reduce congestion and accommodate projected traffic growth through 2030. The summer of 2007 has demonstrated the need for an expanded U.S. plaza. While U.S. bound traffic volumes were lower compared to the same period last year, delays in processing both commercial and passenger vehicles often exceeded 2 hours and at times were reported as 3 hours or more. The inadequacies of the present facility were a major factor in the inability for Customs and Border Protection (CBP) officials to process these vehicles in a timely manner. In particular the lack of inspection booths and secondary processing facilities restrict the ability of CBP to open more lanes when required. The preferred alternative with 20 Primary Inspection Lanes (PILS) which should all be multi purpose (ability to process cars and trucks) will improve the ability for CBP to not only process more vehicles but also allow for lanes to be adjusted according to the type of traffic crossing at any particular time. The ability to add up to 10 additional PILS in the future assures that projected traffic growth in the future can be accommodated.

Changes to I-94/I69 Corridor Will Improve Safety and Reduce Congestion. Dedicated international lanes across the Black River will improve safety as it reduces weaving movements between trucks and cars bound for Canada. The designated lane for FAST and NEXUS participants will expedite their movements to and across the border resulting in less congestion and environmental issues. The new plaza will also reduce congestion and safety concerns on the Highway 402 approach to the Blue Water Bridge in Canada. Numerous collisions, including fatalities have occurred when westbound Highway 402 vehicles have collided with queued vehicles waiting to access the bridge.

Traffic Weave Will Be Eliminated. BWBC is pleased to note that the "City West Alternative" is designed so that commercial trucks entering the United States will be processed on the right side of the plaza. BWBC was required to implement a temporary "merge" as a safety precaution at the base of its span in order to eliminate the dangerous weave movements required by U.S. truck and cars after the last modifications to the U.S. plaza. The new U.S. plaza design will allow BWBC to remove this restriction and allow for a more free flow of traffic.

Constructability and Impacts During Construction. BWBC is pleased to note that the study team has considered the impacts of construction on existing plaza operations. BWBC is committed to work closely with MDOT and CBP to ensure that construction is as minimally disruptive as possible.

The "City West" Alternative adequately addresses all the major reasons identified for the plaza improvements. It also enhances the safety and security of the facility which reduces the vulnerabilities of the plaza to a terrorist incident.

BWBC support the City West Alternative because it addresses the fundamental existing constraints on the Canadian Side of the plaza as well as creating the safest possible environment for the asset. This is critical to both our economies.

BWBC congratulates MDOT on the comprehensive study conducted to determine the best possible infrastructure to meet the existing and future challenges faced by Border Operating Authorities. This preferred alternative includes the flexibility to address changing priorities while maintaining the security necessary to protect its infrastructure.

BWBC concludes that MDOT has completed its responsibilities in its environmental impact statement for the purpose of which it set out to do. BWBC encourage MDOT to proceed into the implementation stage without delay.

Stan Korosec
Vice President/Operations
Vice Président/Operations
Blue Water Bridge Canada
Pont Blue Water Canada
519-336-2720 ext. 295
Email/Courriel : skorosec@bwba.org



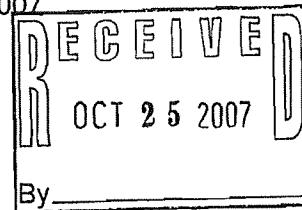
JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF AGRICULTURE
LANSING

DON KOIVISTO
DIRECTOR

October 16, 2007

Mr. David W. Wresinski, Administrator
Project Planning Division
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909



Dear Mr. Wresinski:

RE: Blue Water Bridge Plaza DEIS

I received your request for comment on the Draft Environmental Impact Statement for the proposed Blue Water Bridge Plaza in St. Clair County. I have reviewed the proposal alternatives with Michigan Department of Agriculture (MDA) staff.

Our primary concern, as it relates to this project would be potential impacts the project could have on properties enrolled under Part 361 of the Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994, as amended (formerly Public Act 116 of 1974, the Farmland and Open Space Preservation Act), and on established county and inter-county drains. As noted in earlier correspondence, staff does not anticipate impacts on these lands or infrastructure; nor do we anticipate other Social, Economic and/or Environmental impacts from the project alternatives, as they relate to agriculture and the various functions of the Department.

We do, however, have some vested interest in seeing that the requirements for an adequate inspection facility are met, as requested by USDA Animal and Plant Inspection Service, Plant Protection and Quarantine (USDA-APHIS, PPQ). While MDA is not the primary agency overseeing transnational boundary inspection of incoming food and fiber, it is the agency that is responsible for long-term repercussions if an animal or plant pest, disease or other pathogen, is introduced to the state and its citizenry due to inadequate screening facilities. In view of that, we encourage you to continue to work closely with USDA-APHIS in developing an inspection station to meet their needs.

We appreciate being included in this NEPA Process. Feel free to contact me at 517-241-3933, if you have additional questions.

Sincerely,

Abigail S. Eaton
Resource Specialist
Environmental Stewardship Division



STATE OF MICHIGAN

DEPARTMENT OF COMMUNITY HEALTH
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

JANET OLSZEWSKI
DIRECTOR

October 17, 2007

Mr. David W. Wresinski
Department of Transportation
Project Planning Division
Bureau of Transportation Planning
P.O. Box 30050
Lansing, MI 48909

RE: Blue Water Bridge Plaza Study

Dear Mr. Wresinski:

This letter is in response to your letter dated September 7, 2007 requesting comments relevant to the Blue Water Bridge Plaza Study.

We have determined that there are no healthcare facilities within the study area. There are a few healthcare facilities within a half mile of the study area but based on our research, we believe that any of the alternatives for the proposed Blue Water Bridge Plaza Expansion should have no impact on these or any other healthcare facilities under our jurisdiction.

Access routes for emergency vehicles to the hospital during construction are a concern. However, this concern was addressed in Chapter 3 on page 3.21-3. This page states that MDOT will coordinate with emergency service providers prior to the beginning of construction and at the beginning of new phases of construction. Communication will be maintained throughout construction and adjustments will be developed based on project activity.

Should you have any questions regarding this subject, please feel free to contact our staff member Jay Calewatts, Engineer, at 517-335-6960.

Sincerely,

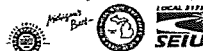
Nick Lyon
Acting Deputy Director, Health Policy
Regulation and Professions Administration

cc: James D. Scott, P.E., HFES

NL/mw

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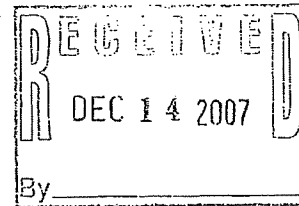
JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

December 10, 2007



Mr. David E. Wresinski, Administrator
Project Planning Division
Michigan Department of Transportation
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. Wresinski:

SUBJECT: Draft Environmental Impact Statement (DEIS)-Blue Water Bridge Plaza Study
St. Clair County Michigan

The Michigan Department of Environmental Quality (MDEQ), Land and Water Management Division (LWMD), has completed review of the DEIS for the Blue Water Bridge Plaza Study, St. Clair County Michigan.

The purpose of the proposed project is to:

- Provide safe, efficient and secure movement of people and goods across the Canadian-U.S. border in the Port Huron Area to support the economies of Michigan, Ontario, Canada and the United States.
- Support the mobility and security associated with needs of national and civil defense.

The alternatives include:

- No Build
- City East Alternative
- City West Alternative
- Township Alternative

The DEIS indicates that while a final determination has not been made, the City West Alternative is preferred at this time. All three build alternatives include the replacement of the existing 4 lane Black River Bridge with a 9-lane bridge; updated interchanges at Water Street and the Lapeer Connector; and a relocated welcome center in Port Huron Township. Potential relocations range from 56 residences and 29 businesses to 155 residences and 34 businesses for the three build alternatives

The LWMD has the following comments:

- 1) Wetland impacts range from 4.4 acres for the City East and City West alternatives to 10.4 acres for the Township alternative. A permit for these impacts will be required from LWMD, under Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).
- 2) Page E-19 Wetlands-states that replacement ratios for forested impacts are 10:1, and the ratios for emergent, scrub/shrub and open water are 2:1

Under Part 303, the replacement ratios are 2:1 for forested wetlands and 1.5:1 for emergent scrub/shrub wetlands.

Copy to M. Webb
12-17-07
SK

- 3) The bridge crossing at Black River and the culvert crossing of Stocks creek will be replaced. A permit will be required from the LWMD under Part 301, Inland Lakes and Streams and Part 31, Water Resources Protection, of the NREPA.
- 4) Page 3.11-3 Stocks Creek-states that the existing 200 foot long triple 6 foot diameter culverts will be replaced with a 210 foot long 12 foot by 8 foot elliptical concrete culvert.
The MDOT should consult with the LWMD and the Michigan Department of Natural Resource to ensure the proper sizing of this crossing to allow for adequate fish passage.
- 5) Page 3.11-6 City East Alternative states that an oil separator system would be used to provide pollutant removal (oil and solids) from the stormwater.

This mitigation component should be added to the mitigation Green Sheet.

- 6) Page 3.12-1 Floodplains. It is recommended that paragraphs 2 and 4 be re-worded as follows.

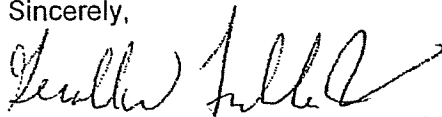
Paragraph 2-The floodplain is divided into two parts, the floodway which carries most of the flow during a flood event, and the floodway fringe which is an area of very slow moving water or "slack water". **The floodway is the high hazard area during times of flooding.**

Paragraph 4-The State of Michigan's Floodplain Regulatory Authority, found in Part 31, Water Resources Protection, **of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)** requires that a permit be obtained prior to any alteration or occupation of the 100-year floodplain of a **stream /drain with a drainage area of 2 square miles or more**. The purpose of Part 31 is to assure that **projects** do not obstruct the flow of water and **cause a harmful interference** in the 100-year floodplain and that **the floodway** portion of the floodplain is not used for residential construction. **Part 31 is enforced by** the Michigan Department of Environmental Quality.

- 7) Page 3.13-6- Figures 3.13.1 and 3.13.2-The figures are confusing in that part of the wetlands are shown in yellow and part are in blue along Stocks Creek.

If you have any questions please contact Mr. Alex Sanchez at 517-335-3473 or you may contact me.

Sincerely,



Gerald W. Fulcher, Jr., P.E., Chief
Transportation and Flood Hazard Unit
Land and Water Management Division
517-335-3172

cc: Mr. David Williams, U.S. Federal Highway Administration
Ms. Sherry Kamke, U.S. Environmental Protection Agency
Mr. Craig Czarnecki, U.S. Fish and Wildlife Service
Mr. John Konik, U.S. Army Corps of Engineers
Mr. Andrew Hartz, MDEQ
Mr. Alex Sanchez, MDEQ

SEMCOG... Local Governments Advancing Southeast Michigan

Southeast Michigan Council of Governments • 535 Griswold Street, Suite 300 • Detroit, Michigan 48226-3602 • 313-961-4266 • Fax 313-961-4869
www.semcog.org

December 6, 2007

Mr. Bob Parsons
Public Hearings Officer
Michigan Department of Transportation
PO Box 30050
Lansing, MI 48909

Todd -
FYI more
Comments
- Matt

Re: Review of the Blue Water Bridge Plaza Study Draft Environment Impact Statement

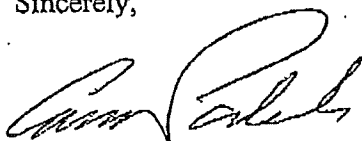
Dear Mr. Parsons:

SEMCOG has reviewed the Draft Environmental Impact Statement (DEIS) for the "Blue Water Bridge Plaza Study" provided by Michigan Department of Transportation and its consultants. As part of this review, we consulted with St. Clair County, local communities and the Michigan Department of Transportation and its consultants.

Attached is the memorandum that summarizes SEMCOG's review of the DEIS. In general, we believe the DEIS does a good job of identifying the impacts of the proposed project. However in some instances, we feel additional information/analysis is needed.

I hope our comments assist you with moving this project forward. We are looking forward to being actively involved in the future stages of the project. If you have any questions, please contact us at (313) 961-4266.

Sincerely,



Carmine Palombo, P.E., Director
Transportation Programs

cc: William Kauffman, St. Clair County Metro Planning Commission

Enclosure

CP:sm

William T. Roberts
Chairperson
Mayor,
City of Walled Lake

Mary Blackmon
First Vice Chair
Trustee, Wayne County
Regional Education
Service Agency

Robert J. Cannon
Vice Chairperson
Supervisor,
Clinton Township

Phillip M. Cavanaugh
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MEMO

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December 4, 2007

TO: Carmine Palombo

FROM: Transportation Staff

SUBJECT: Review of Blue Water Bridge Plaza Study Draft Environmental Impact Statement

The Blue Water Bridge is a major border crossing of people and goods between the United States and Canada. The bridge and the plaza both serve both national and international needs. While the construction and operation of the new Blue Water Bridge Plaza will provide for improved accessibility and security for border crossing, it will have impacts on the City of Port Huron and the local area adjacent to the plaza that need to be addressed.

Introduction

SEMCOG has reviewed the Draft Environmental Impact Statement (DEIS) for the "*Blue Water Bridge Plaza Study*" provided by Michigan Department of Transportation and its consultants. The DEIS was reviewed for its consistency with the SEMCOG adopted 2030 Southeast Michigan Regional Transportation Plan goals and objectives and SEMCOG policies. This memorandum contains some general comments, as well as some specific questions or concerns that arose during review. Specific elements of the DEIS reviewed were: air quality findings (Section 3.9); traffic impact study; Environmental Justice (Section 3.3); and Storm Water (Section 3.11).

The DEIS analyzed and compared four alternatives for improvements to the Blue Water Bridge Plaza and the I-94/I-69 corridor.

No build alternative: The no-build alternative would not require any expansion to the plaza or I-94/I-69 corridor.

City East Alternative: The City East Alternative would require the expansion of the plaza in the City of Port Huron and would relocate Pine Grove Avenue to the east and make improvements along the I-94/I-69 corridor.

City West (Preferred Alternative): The City West Alternative would require the expansion of the plaza in the City of Port Huron and would relocate Pine Grove Avenue to the west and make improvements along the I-94/I-69 corridor.

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Township Alternative: The Township Alternative would relocate most plaza functions to the plaza in Port Huron Township and make improvements along the I-94/I-69 corridor.

Review Comments

Responses to the DEIS are based on SEMCOG review and questions and concerns raised by St. Clair County and the communities.

In general, the DEIS does a good job of addressing potential impacts regarding air quality, environmental justice, traffic impact and storm water drainage but lacks detail in some critical areas. Comments follow under the appropriate subject headings.

Air Quality

- In general, all of the proposed alternatives should result in reduced congestion and idling at the Blue Water Bridge and thus provide better air quality than would be experienced under a do-nothing scenario. However, more detailed information, directly comparing the different alternatives, would provide a better understanding of the relative benefits and negative impacts of each alternative in relation to the others.

Section 3.9.1: Current Air Quality Status

- Current air quality status should focus on Southeast Michigan and St. Clair County rather than the entire state. It should talk about monitored levels of ozone and PM2.5 (annual and 24-hour) in St. Clair County compared to other parts of the region and note recent trends in the data. There is concern over more idling concentrated in the plaza and roads heading to the plaza all of which currently occur in Canada.
- Reference should be made on the most recent emissions inventory data for these pollutants, not the data in the State's 2005 Annual Air Quality Report. Attached are tables showing MDEQ's latest ozone emissions inventories for St. Clair County and the entire SEMCOG Region. Also enclosed is SEMCOG's latest on-road mobile source emissions inventory for PM2.5. MDEQ is in the process of developing emissions inventories for the other PM2.5 source categories (point, area & off-road). Contact John Schroeder (jschroeder@michigan.gov) to see if this data is available for inclusion in the document.
- With regard to Regional Transportation Conformity analysis, an early alternative of the Blue Water Bridge Plaza study was included in the conformity demonstration of SEMCOG's 2030 Regional Transportation Plan (RTP). SEMCOG is updating its transportation model network to reflect the currently preferred alternative (City West) and will include this project in its next conformity analysis. The preferred alternative is expected to meet regional conformity requirements. The analysis will be completed in March 2008.

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3.9.3: Impact of Particulates

- SEMCOG agrees that a PM2.5 hotspot analysis should be performed on the preferred alternative, following the federal guidance that was issued by EPA and FHWA in March 2006.

3.9.4: Impact of Mobile Source Air Toxics (MSAT)

- While validated models for predicting MSAT pollutant concentrations are not yet available, pollutant burdens can be quantified and compared between alternatives. We believe that a Tier 3 analysis, as described in FHWA's 2006 *Interim Guidance on Air Toxic Analysis in NEPA Documents*, is appropriate for this project due to the high level of truck traffic associated with the bridge plaza and the level of community concern regarding the project. Such an analysis would help the effected communities better understand and evaluate the different alternatives, particularly in relation to the Do-Nothing scenario. While overall traffic volumes will be roughly the same between the different alternatives, the changes in traffic speed and associated idling will create differences in emission levels. Providing a pollutant burden table that shows these differences would give a better understanding of the relative impacts of the different alternatives.

Air Pollution Mitigation

- The report states that "implementation of a construction emissions reduction plan may be considered" and lists a number of actions that may be included in this plan. The DEIS does not indicate if such a plan is to be implemented and when that decision will be made?
- The section on Off-Road Construction Equipment references Tier 2 standards for non-road equipment. However, stricter Tier 3 standards began taking effect in 2006 and will be fully phased in by 2008. These are the standards that should be met for off-road construction equipment.

Traffic Impacts

All of the build alternatives are preferable to the no-build alternative from a traffic impact perspective. The traffic impacts on all of the build alternatives are comparable. Following is a synopsis of the DEIS traffic impact findings followed by SEMCOG's comments:

No build alternative: This alternative would result in the highest congestion problems (greater than 55 seconds delay per vehicle) for some of the local street intersections and freeway segments congestion (greater than 88% of capacity).

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City East Alternative: This alternative would experience moderate levels of congestion (21 to 55 seconds delay per vehicle) for some of its critical intersections and low levels of congestion (0 to 47% capacity) for all of the freeway intersections. The ramps would experience moderate congestion (48 to 88% of capacity).

City West (Preferred Alternative): This alternative would experience moderate levels of congestion (21 to 55 seconds delay per vehicle) for some of its critical intersections and only two freeway segments would experience moderate levels of congestion (48 to 88 % of capacity).

Township Alternative: This alternative would experience moderate levels of congestion (21 to 55 seconds delay per vehicle) for all of the intersections and low to moderate levels of congestion (48% to 88% of capacity) for freeway and arterial segments.

- Based on the conclusion from the DEIS, the City West preferred alternative would improve the flow of traffic and would provide adequate capacity for current and future traffic on local roads, freeway segments, and mobility through the plaza resulting in less vehicle queues and backups on the freeway network.
- The City West preferred alternative adequately meets all of the requirements developed and identified in Table 2.3.1 Summary of Alternative Evaluation. The preferred alternative would address the potential congestion problem along the M-25 corridor by improving the intersection capacity, adjusting traffic signal operations, adding turn lanes, and/or adding through lanes until low to moderate levels of congestion are achieved.
- The planned modification to the existing I-94/I-69 Bridge over the Black River widens it from four (4) lanes to nine (9) lanes through the preferred alternative. This improvement to capacity is expected to overcome the need for additional crossing over the Black River. However, there is question whether this capacity improvement does in fact address local community concerns. Further consultation is needed with community officials to address these concerns.
- Roundabout Safety: Appropriate use of roundabouts should be analyzed carefully and should be able to provide adequate capacity for future traffic. Roundabouts are considered as a viable option for some of the existing or new intersections needed for the proposed improvements. Roundabouts are gaining popularity in United States, and are seen as an efficient way to manage traffic flow and improve safety at intersections.
- ITS Technology: The study team has identified the use of inspection technologies for safe and efficient movement, especially for truck traffic. These technologies include Gamma Ray Inspection Technology (GRIT) and radiation portal detectors.

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- Traffic Forecast: It has been determined by the study team that bridge security, not traffic volumes, is the driving factor in the design of the plaza. The Traffic Analysis Report includes a high and low range traffic forecast, and is able to acknowledge the recent change in traffic volumes experienced at the bridge.
- Local Road Traffic Impacts: The DEIS does an adequate analysis of the freeway system, but needs clarification on number of items particularly to local roads and community impact. The key issues identified are as follows:
 - A corridor traffic progression analysis should be performed and provided in the Final Environmental Impact Statement since the preferred alternative would add two new signalized intersections and a roundabout (see Table 2.2.4) along Pine Grove Avenue. A stronger effort is needed to time the signals along Pine Grove Avenue, which continues to be a problem.
 - The impact of introducing signalized intersections and a roundabout within close proximity to each other should be discussed.
 - On page 2.2-20, it is mentioned that certain roadway segments will not be able to meet design standards for curve length, radii and design speed, the study should clarify how the potential safety and performance issues will be addressed. Access management and other techniques should be applied to help address such issues.
 - The report should clearly indicate the individual street that will be closed as a result of the preferred alternative, as this would be a major connectivity issue for neighborhood around the plaza, particularly along 10th Avenue. The potential increase in traffic along 10th Avenue and the intersection of 10th Avenue and Hancock Street should also be considered in analysis.
 - On page 2.2-32, the report needs to specify type of intersection control proposed for the intersection of Lapeer Connector with the collector road.
 - On page E-25 (Figure E.16), the symbols that correlate to the legend appear to change in size. If different sizes indicate difference in features or performance measures, please explain, otherwise correct graphic.

Non-motorized Corridor Over The Black River: The DEIS does not acknowledge receipt of the non-motorized trail plan developed by St. Clair County Parks and Recreation. The plan was developed in collaboration with County Parks, Port Huron Township Supervisor, Port Huron City Engineer, and the Port Huron City Planner. The plan contains a City of Port Huron and Port Huron Township proposal for a non-motorized traffic bridge over the Black River connecting to Water Street on the west side and the Bridge to Bay Trail

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on the east side. The final EIS should reference the trails plan and indicate that the provision of a non-motorized crossing will move forward in the next stages of the project.

Economic Benefits

Construction and other related jobs would be created as a result of the plaza project. The study team estimates that 4,220 short-term construction jobs would be available over a 5-year construction period. All of the build alternatives would reduce future congestion at the border crossing providing positive economic benefits to trucking firms and other companies and individuals involved in border crossing trade.

The preferred alternative could decrease cost of travel to motorists, as congestion and delay would be reduced by the improvements. It has been identified in the DEIS that future traffic growth at the Blue Water Bridge will depend more on the economic conditions across the United States than local or regional economic growth.

The large plaza footprint has an impact on both the residents and businesses in the area. What are the implications on tax revenues (property tax base, income tax, and school tax) from the loss of residences, businesses, and school-age children? Further, what demands does the facility place on emergency first responders.

The five-year construction time-period will cause disruption to adjacent residents and businesses. What efforts will be undertaken to mitigate such disruption?

Welcome Center

It has been determined that the Welcome Center would not be constructed in the median of the I-94/I-69 freeway as originally discussed, because of safety concerns and parking requirements. The build alternatives propose a new Welcome Center on vacant land in Port Huron Township approximately one mile west of its current location that is better suited to meet MDOT's design standards. It has also been identified in the study that MDOT will hold a public meeting to develop design aesthetics and landscaping treatments for the new Welcome Center. The public meeting should also include design aesthetics and landscaping treatments in and around the plaza itself.

Environmental Justice

There appears to be no disproportionately high environmental impacts on minorities and/or low-income populations from the preferred alternative. The impacts from the preferred alternative would be similar for all groups regardless of demographic or socioeconomic characteristics of the community.

MDOT has indicated that they will provide purchasing, relocation assistance and advisory services for anyone whose property is needed for the project. However, concerning properties not taken by the new plaza, the project will reduce neighborhood cohesion in the blocks surrounding the existing plaza. That area would be divided as a result of the plaza expansion

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causing several local businesses to be relocated. This division of the neighborhood could potentially present a challenge to the local low-income population to find sufficient alternatives to the departed businesses of comparable types.

Storm Water

Any transportation facility of this magnitude will result in potential storm water runoff concerns. The existing plaza (no build alternative) does result in untreated stormwater entering our water resources. Therefore, the alternative scenarios provide an opportunity to incorporate stormwater management into the site design.

The build alternative scenarios make reference that the runoff would be treated prior to entering the waterbody. However, more information on the detailed stormwater management techniques should be provided. The following information reflects the requirements often found in a stormwater ordinance and should be incorporated into the design of the project:

- There will be no direct discharges of stormwater runoff to the receiving water.
- The runoff from the project will equal presettlement runoff rates.
- Native vegetation will be used in all plantings.
- Ensure the proper vegetation type and amount in the grassy buffer areas to ensure that erosion does not occur from overland flow.
- Invasive species will be removed from the site.
- Keep the natural drainage ways intact.
- Infiltration and Low Impact Development (LID) practices will be utilized, when feasible based on appropriate soils, locations, and pollutant removals. This includes porous pavement in low traffic volume areas, bioswales along roads, and bioretention in parking lots.
- Public education signage for LID techniques should be incorporated into the site.

SEMCOG is in the process of developing a LID manual for Michigan. It will be completed in May 2008 and will be able to provide details on how to design LID techniques.

Southeast Michigan Ozone Emissions Inventory

Volatile Organic Compounds (VOC)

Tons/Summer Day

Geographic Area	Year	Source				
		Point	Area	On-Road Mobile	Off-Road Mobile	Total
St. Clair County	2005	5.55	5.20	4.70	11.35	26.80
	2009	4.40	7.53	3.50	10.32	25.75
	2018	5.54	7.93	2.10	8.94	24.51
SEMCOG Region	2005	62.48	220.37	126.10	152.43	561.38
	2009	51.20	207.10	93.30	127.41	479.01
	2018	60.15	215.82	53.00	111.28	440.25

Source: Michigan Department of Environmental Quality, *Request to Redesignate to Attainment Status: Southeast Michigan Counties of Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne, 2007.*

Nitrogen Oxides (NOx)

Tons/Summer Day

Geographic Area	Year	Source				
		Point	Area	On-Road Mobile	Off-Road Mobile	Off-Road Mobile
St. Clair County	2005	80.88	0.67	11.60	7.83	100.98
	2009	69.71	0.99	7.80	6.54	85.04
	2018	73.08	1.02	3.00	5.69	82.79
SEMCOG Region	2005	266.58	15.50	335.40	119.77	737.25
	2009	186.86	25.55	222.80	97.68	532.89
	2018	194.64	26.38	80.50	67.57	369.09

Source: Michigan Department of Environmental Quality, *Request to Redesignate to Attainment Status: Southeast Michigan Counties of Lenawee, Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne, 2007.*

Southeast Michigan Fine Particulate Matter (PM2.5)

On-Road Mobile Source Emissions Inventory

Tons/Year

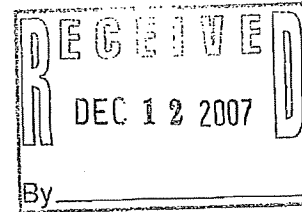
Scenario	Emissions		Associated Annual VMT (in millions)
	Primary PM2.5	NOx	
2002	2,766	151,540	46,496
2010	1,348	68,467	49,170
2020	799	23,123	51,726
2030	762	15,458	53,803

Source: SEMCOG, *Fine Particulate Matter (PM2.5) Conformity Analysis of the Proposed Amendment of SEMCOG's 2030 Regional Transportation Plan for Southeast Michigan*, October 31, 2007.

United States Senate

WASHINGTON, DC 20510

December 10, 2007



Mr. Bob Parsons
Public Hearings Office, MDOT
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. Parsons:

We are writing to express our concerns regarding the Blue Water Bridge Plaza Draft Environmental Impact Statement.

As you know, the Community of Port Huron has continued to raise many concerns and questions regarding this expansion project. Community leaders acknowledge the legitimate need to enhance border security and improve traffic flow at the bridge, and have been working closely with all the federal and state agencies involved. They have a legitimate interest in the impact this expansion will have on the residents and businesses.

However, at this stage of the process we are very concerned about the number of outstanding questions and unresolved issues raised by the City and County related to the justification of the scope of the project and the thoroughness of the Environmental Impact Statement. We encourage you to work with City and County officials to address their concerns and to explore opportunities to address the potential economic impact of the project on the surrounding communities.

We urge all the agencies involved in this project to continue to work closely with the community of Port Huron to address these serious questions and issues. As always, if we can be of assistance in any way in this process, please let us know.

Sincerely,

Carl Levin
United States Senator

Debbie Stabenow
United States Senator

cc: Robert Perez, Customs and Border Protection

Matt Webb, MDOT

Jim Sharp, General Services Administration

Mark Lundgen, General Services Administration

Vance, Rhonda K.

From: Davis, Todd J
Sent: Tuesday, December 11, 2007 11:25 AM
To: Vance, Rhonda K.
Subject: FW: DEIS Comments from U.S. Rep. Candice Miller

Attachments: BWB DEIS Comments_1.pdf



BWB DEIS
Comments_1.pdf (654)

Todd J. Davis, AICP
Wilbur Smith Associates
w: 517.323.0500 Ext. 104 m:517.282.7216 f: 517.323.9200 TDavis@WilburSmith.com

-----Original Message-----

From: Bob Parsons [mailto:ParsonsB@michigan.gov]
Sent: Tuesday, December 11, 2007 11:19 AM
To: Caleb Overdorff
Cc: Karen Czernel
Subject: Re: DEIS Comments from U.S. Rep. Candice Miller

Dear Mr. Overdorff:

Thank you for submitting Congresswoman Miller's comments on the Blue Water Bridge Plaza Study. We appreciate her expressing her thoughts on the document. With this response, I am forwarding them to the study team members for review. They also will become part of the official transcript of comments received through December 10, 2007, the extended deadline for comments. Comments will be addressed in the Final Environmental Impact Statement next spring. For further information on the study, and to review the draft document on line, please check our Web site at www.michigan.gov/bluewaterbridgeproject. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Bob Parsons

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"Seek first to understand,
then to be understood."

Stephen R. Covey

>>> "Overdorff, Caleb" <Caleb.Overdorff@mail.house.gov> 12/10/2007
>>> 4:24:40PM >>>
Mr. Parsons,

Here are Congresswoman Miller's comments for the DEIS. I submitted them through the website last week, but I wanted to make sure they were in the record.

Caleb Overdorff
Rep. Candice Miller
202-225-2106

<<BWB DEIS Comments.pdf>>

CANDICE S. MILLER
10TH DISTRICT, MICHIGAN

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Congress of the United States
House of Representatives
Washington, DC 20515-2210

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COMMITTEE ON
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WATER RESOURCES
AND ENVIRONMENT

December 5, 2007

Mr. Robert H. Parsons
Public Involvement and Hearings Officer
Bureau of Transportation Planning
Michigan Department of Transportation
PO Box 30050
Lansing, MI, 48909

Mr. Parsons:

As Michigan's 10th District representative in the U.S. House, I write to provide my comments on the Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study.

The Blue Water Bridge Plaza Study has been an important collaboration involving local, state, and federal government agencies. A border plaza exists to perform a function that is almost contradictory: to expedite legitimate cross-border traffic while also protecting our nation against the illegal importation of people and goods in addition to protection from external threats such as terrorism. This effort involves numerous government agencies including the Michigan Department of Transportation (MDOT), Customs and Border Protection (CBP), and the Federal Highway Administration. It is imperative that a border crossing function as efficiently as possible while at the same time providing needed protections to our nation.

This study has faced many challenges over the years because of the very unique circumstances of the border crossing at Port Huron. We are faced with the need to expand the capacity of the existing plaza in a heavily urbanized area. We must also deal with the realities of border protection requirements in a post-9/11 world. Doing so in a way that is agreeable to all parties has proven to be a very difficult challenge.

This situation is not made any easier by the previous work at the plaza when the second span was built in the 1990's. Poor planning and design to adapt the plaza to serve two spans caused a dangerous weave for traffic entering the United States and made it more difficult to plan for future expansion to accommodate increasing traffic and enhanced security needs.

As this study has been taking place, I have viewed my role in this process to assist in securing federal funding and to facilitate communication between involved federal, state and local agencies. The 2005 SAFETEA-LU legislation directed \$43 million to offset the cost of this project to the state. Though I have since attempted to move a portion of this funding to other important transportation projects in St. Clair County because of the slow pace of progress in this project and my sincere desire to ensure that this money benefit the many transportation infrastructure challenges in St. Clair County, I believe it is important that the federal government continue to assist with the construction of the plaza, provided that it is done in a way that expedites crossings and security while at the same time limiting negative impacts on the community.

I have also attempted to facilitate communication among the involved agencies by having the Department of Homeland Security appoint a liaison to expedite decision making within CBP in regards to the plaza at the Blue Water Bridge. We have also brought together MDOT and key federal agencies in the same room in order to address communication problems and develop a better understanding of each agency's objectives.

Unfortunately, communication has been a problem that has plagued this project from the beginning. Of particular concern has been the inability of the affected communities to receive answers to their questions from MDOT. This project is going to have a major impact on the city of Port Huron and surrounding municipalities. Local government leaders as well as residents should be relevant participants in this process to ensure that the new facility makes as little negative impact as possible. But at this stage, local officials remain very concerned that the preferred alternative is larger than necessary, which will cause irreparable damage to their community and a deterioration of an already diminishing tax base.

The preferred alternative identified by MDOT has some very good merits. Most importantly, it satisfies each of CBP's requirements to properly inspect persons and vehicles entering the United States. The preferred alternative is large enough that it should not need any modification for several decades. The plaza also includes significant acreage for future expansion within its boundaries that allow it to handle future traffic projections.

There is no question that traffic at the Blue Water Bridge increased exponentially through the 1980s and 1990s resulting in the twinning of the bridge in 1997. As the DEIS notes, truck traffic crossing each way on the Bridge increased by more than 130% between 1990 and 2000. At the same time, passenger traffic decreased by roughly 450,000 crossings during the same period. The net increase from 1990 to 2000 was roughly 450,000 total crossings for a grand total of just under 6 million in 2000.

Yet, this total increase did not meet MDOT's traffic projections for the Blue Water Bridge which was approximately 8 million crossings in 2000, according to the Blue Water Bridge Additional Capacity Project Environmental Report in 1994. Since 2000, overall traffic has actually decreased on the Bridge despite an increase in

commercial traffic. As a result we have seen an even wider variation between the traffic projections and the actual traffic numbers.

The current plaza is simply inadequate to meet CBP's needs in a post-9/11 world. But my specific concern is that the traffic projections which have been used to develop the preferred alternative are overly optimistic about future needs. It seems that basing future traffic growth on the rapid growth of the 1980s and 1990s will inevitably result in a plaza footprint far in excess of what may actually be required. Given the slow down of the domestic auto industry, the prospect of fewer Canadian trash trucks crossing the bridge, and newer technology to speed processing times, I have serious questions about whether a plaza the size of the preferred alternative is necessary.

It seems to me that MDOT should revisit this issue of traffic projections and work with community leaders and CBP to ensure that the new plaza meets but does not greatly exceed CBP's operational necessities all of which should have a focus on limiting to the greatest extent possible its negative impact on the City of Port Huron. If I can be of assistance on this or any other matter, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Candice S. Miller".

Candice S. Miller
Member of Congress

Vance, Rhonda K.

From: Davis, Todd J
Sent: Monday, December 10, 2007 4:57 PM
To: Vance, Rhonda K.
Subject: FW: DEIS Comments

Todd J. Davis, AICP
Wilbur Smith Associates
w: 517.323.0500 Ext. 104 m:517.282.7216 f: 517.323.9200 TDavis@WilburSmith.com

-----Original Message-----
From: Bob Parsons [mailto:ParsonsB@michigan.gov]
Sent: Monday, December 10, 2007 4:40 PM
To: District 81
Cc: Ronald DeCook
Subject: Re: DEIS Comments

Dear Representative Pavlov:

Thank you for commenting on the Blue Water Bridge Plaza Study. I especially appreciate your empathy for the task of sorting through and responding to the suggestions and concerns we have received on the Draft Environmental Impact Statement. I can assure you that the study team will very carefully consider every comment and provide appropriate responses in the Final EIS. With this response, I am forwarding your comments to the study team members for review. They also will become part of the official transcript of comments received through today, December 10, 2007, the extended deadline for comments. As noted, comments will be addressed in the Final Environmental Impact Statement next spring. For further information on the study, and to review the draft document on line, please check our Web site at www.michigan.gov/bluewaterbridgeproject. Again, thank you for expressing your concerns. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Bob Parsons

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"Seek first to understand,
then to be understood."
Stephen R. Covey

>>> "District 81" <Dist081@house.mi.gov> 12/10/2007 3:54PM >>>

Dear Mr. Bob Parsons,

Attached are my comments on the Blue Water Bride Plaza DEIS. I have put the original in the mail today, and have copied the text below in case there are problems opening the file.

Thank you for the opportunity to comment. Please let me know if there is anything my office can do to help.

Sincerely,

Phil Pavlov
State Representative
81st District

Letter Text:

December 10, 2007

Mr. Bob Parsons
Public Hearing Officer
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

Re: Blue Water Bridge Plaza Study - Draft Environmental Impact Statement (DEIS)

Dear Mr. Parsons:

After today you will have the difficult task of sorting through all of the public comment on the Blue Water Bridge Plaza Draft Environmental Impact Statement (DEIS). While I do not envy your task, I cannot stress enough the importance of it.

Over the last two months our community leaders have come together to identify their major problems with the DEIS. With a united voice, they summarized their issues and sent in their comments. I write today in support of their concerns related to Section 1 of the DEIS and supporting technical reports.

As mentioned, our community acknowledges that there is a legitimate need to improve the existing bridge plaza infrastructure in order to reduce processing delays, enhance security, and accommodate new technologies. However, since the new plaza will be a permanent fixture in our community, it is imperative that our concerns are addressed.

I urge you to take the time to adequately reflect upon and respond to the issues identified by our community. Please feel free to contact me at my office (1-517-373-1790) if I can be of further assistance as you continue this process.

I stand ready to work with you and all involved parties to ensure that these issues are not overlooked. Thank you for your time.

Sincerely,

PhilPavlov
StateRepresentative
81st District



COUNTY OF ST. CLAIR

Office of the Administrator/Controller



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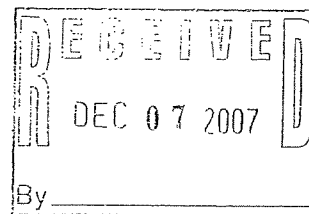
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VISION: We are the leader in
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improve public services that
enhance the community for
citizens and future generations
of St. Clair County.

December 5, 2007



Mr. Bob Parsons
Public Hearings Officer
Michigan Department of Transportation
PO Box 30050
Lansing, MI 48909

Re: **Blue Water Bridge Plaza and Corridor Projects - Executive
Summary of Review and Mitigation Issues**

Dear Mr. Parsons:

The St. Clair County Board of Commissioners and Administration acknowledge that improvements to the Blue Water Bridge Plaza and the existing corridor are necessary to enhance traffic flow and security at this critical border crossing. These projects will permanently alter our community and we have the obligation to the citizens of this County to mitigate any anticipated adverse impacts. Therefore, we have worked diligently with the County departments/agencies and the municipalities affected (including the City of Port Huron, Charter Township of Port Huron and the Charter Township of Fort Gratiot) to come to agreement on the impacts of these projects. Although each of the government entities has individual concerns about the plaza and corridor projects, we have come to a consensus on many issues, which will be outlined in this summary.

In our collaborative effort with the City of Port Huron, Township of Fort Gratiot and the Township of Port Huron, it has been agreed that the City of Port Huron shall act as the lead agent. However, each entity shall submit a listing of their concerns, questions and comments directly to Michigan Department of Transportation (MDOT). It is also the consensus of local government agencies that MDOT has failed to provide sufficient answers in the Draft Environmental Impact Statement (DEIS). The DEIS does not provide full public disclosure of impacts, does not adequately justify the project's costs/negative impacts, does not evaluate a reasonable range of alternatives and does not provide adequate and definitive mitigation for the negative impacts that are expected.

Over the course of the year and since the release of DEIS from MDOT and the Federal Highway Administration, St. Clair County departments and agencies have compiled a series of questions and concerns (attached as Exhibit A) that will need to be addressed by MDOT.

In addition to the questions/comments provided to MDOT in Exhibit A, there are several mitigation priorities that were identified by our collaboration with the other municipalities. They are outlined below:

1. The improvements to the I-69/I-94 corridor, including the Black River Bridge, must be evaluated as a separate project as previously planned by MDOT. It is imperative that we do not delay the corridor project while the plaza is being evaluated and debated. All communities agree that the plaza and the corridor projects must be separate projects.
2. The structures throughout the projects (plaza and corridor) will need to reflect the unique characteristics of the host communities. We will need input and assurances that the retaining and security walls will be aesthetically pleasing. The construction will need to soften the impact of the walls and enable the site to become a community asset. We need to have an architectural WOW!
3. There must be a definite plan on where to locate the livestock/plant inspection and quarantine facility. What are the facility plans for holding livestock? How will animal waste be disposed? Is there a quarantine facility in the plaza? If so, where is it located? If not, how will infected or diseased animals be handled?
4. Relocation of the Welcome Center that would allow easy access to return to the City of Port Huron and the Township of Fort Gratiot. As currently proposed, traffic exiting the Welcome Center would have no other option except to head in the westbound direction and would have to travel approximately 12-14 miles to return to the Blue Water Area. Travelers from both directions should have the ability to access the Welcome Center and view the opportunities and assets in the Blue Water Area. The project design must not act as an impediment to accessing those community assets. Therefore, we request that the Welcome Center be located in the center median of the I-69/I-94 Corridor. We fully understand that having the center median would require the posted speed limit to be lowered to 55 miles per hour.
5. Sufficient ingress/egress must be provided in the construction zone for emergency routes for law enforcement, fire and EMS. The primary hospitals are south of the construction zone and there are numerous businesses and facilities, such as nursing homes, north of the construction zone. We cannot jeopardize the response time of our emergency responders. We need to see plans and designs for multiple

points of access for emergency responders to the hospitals, senior living facilities, and evacuation routing in general through the footprint of the plaza accommodating users that may be north of the plaza.

6. We need our federal and state legislators to publicly voice their opinions on these projects, including draft, design and submit public comments.
7. It is necessary for MDOT to officially recognize the M-25 alternate route and work with the local road agency to contribute the resources necessary for long-term maintenance of this alternate route.

City of Port Huron, Township of Fort Gratiot, Township of Port Huron and the County of St. Clair, as host communities to the plaza and corridor projects, have identified a number of items that will be required. The host community requirements are as follows:

1. It is clear that City of Port Huron, County of St. Clair and the local school districts will lose revenue as a result of the Blue Water Bridge Plaza project. There are property tax revenues, income tax revenue, personal property tax revenues, State revenue sharing, utility revenues, water/sewer revenues, etc. All of these revenue losses will have a significant impact on our communities. Since the magnitude of these losses are so severe, the entities that have an interest must be supplied a permanent revenue stream to lessen the impact. We are requesting a payment in lieu of taxes (PILOT) in the form of an increase in the bridge crossing tolls and the revenues of said increase be directed to the City of Port Huron, County of St. Clair, and school districts and any other taxing jurisdiction. This PILOT should completely cover all tax revenue losses as well as any additional costs the municipalities may incur in the form of additional emergency responder duties, such as police, fire, EMS, HAZMAT, etc.
2. A supplemental DEIS is needed to address the shortcomings of the present DEIS and to assure that there is full disclosure/adequate opportunity for public comment at this stage in the process. It is not acceptable for our concerns to be addressed only in the Final Environmental Impact Statement. Once the supplement DEIS is released, there must be opportunity for another 60-day public comment review period.
3. It will be necessary to have a non-motorized crossing over the Black River and tying it into a route connecting the Township Park with Edison Parkway.

4. MDOT will need to include the construction of the Visitor's Center immediately adjacent to the plaza with access from all directions. There must be significant signage to ensure that motorist will have a clear view of this facility from all directions.
5. MDOT representatives have made a general statement that the agency will work with local communities and citizens in order to identify possible state and federal resources. However, there were no concrete assurances outlined in the DEIS. We would like to ensure that the Community Assistance Team (CAT) will meet with each of the affected communities to provide various tools and incentives that will enhance long-term economic development plans. Further, strict application of and adherence to existing program guidelines must be relieved. CAT team members must be provided with the flexibility to work with the community in developing creative solutions to the unique situation we find ourselves in.

The communities require CAT support in obtaining various grants for project, such as:

- a. the sewer separation project in the City of Port Huron;
- b. retraining of workforce through RESA and/or school districts;
- c. rehabilitation of the McMorran Plaza;
- d. emergency and first responder equipment and training for all local jurisdictions; and
- e. revitalization of the M-25 corridor both north and south of the plaza.

The preferred alternative that MDOT is proposing will have an enormous impact on the community and the future of our community. Therefore, MDOT's commitment to the economic security of our community must be proportionate.

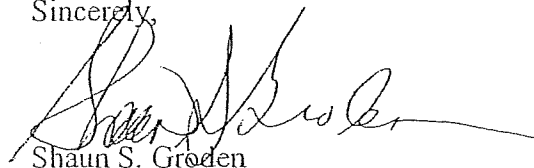
6. Off-site improvements to section of M-25 from Pine Grove to Fort Gratiot Business District (Birchwood Mall) must be made in order to maintain efficient traffic flow in the surrounding areas, as follows:
 - a. synchronization of lights from Business Route I-94 at Oak to Metcalf Road;
 - b. Base line study of travel time from Oak to Metcalf Road, as well as regular (every year) evaluation of the same with resulting changes to light synchronization and access management strategies;
 - c. lane expansion, including one lane northbound and one lane southbound, from the plaza north to Krafft Road.
 - d. expansion and safety improvements of the M-25 Black River Bridge, including amendments to the weight limitations if necessary; and

- e. planning and implementation of access management strategies from the plaza north to Metcalf Road.

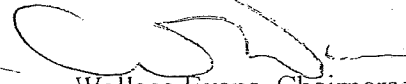
St. Clair County's commitment to providing full public disclosure of the impact of these projects is unwavering. The DEIS provided by MDOT does not provide satisfactory impacts and we require MDOT to review and answer the questions outlined in Exhibit A. Once a supplemental DEIS is released, we will require at least another 60-day review period to provide additional public comments.

If you would like to meet with us on any of the issues, please do not hesitate to contact us.

Sincerely,



Shaun S. Groden
Administrator/Controller



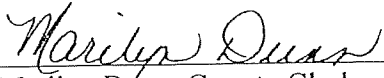
Wallace Evans, Chairperson
Board of Commissioners

Enclosures

Cc: The Honorable Candice Miller
The Honorable Debbie Stabenow
The Honorable Carol Levin
The Honorable Jud Gilbert
The Honorable Daniel Acciavatti
The Honorable Phillip Pavlov
The Honorable John Espinoza
City of Port Huron
Township of Fort Gratiot
Township of Port Huron

I, Marilyn Dunn, Clerk of the County of St. Clair, do hereby certify that the attached extract from the minutes of a regular meeting of the St. Clair County Board of Commissioners, Port Huron, Michigan, held on December 5, 2007, is a true and correct copy of the original Minutes of said meeting on file and of record insofar as said original Minutes related to the matters set forth in said attached extract, and I do further certify that the copy of the resolution appearing in said attached extract is a true and correct copy of such resolution adopted at said Meeting on file and of record.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal of the County of St. Clair, Michigan, this 6th day of December, 2007.


Marilyn Dunn, County Clerk
County of St. Clair, Michigan

RESOLUTION 07-44

ST. CLAIR COUNTY RESPONSE TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT
FOR THE BLUE WATER BRIDGE PLAZA STUDY

WHEREAS, the Blue Water Bridge crossing between the U.S. and Canada is a critical economic link for both countries and security improvements at the plaza are a necessary and viable objective; and

WHEREAS, the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA) have published a Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study which is dated August 10, 2007, with public comment being accepted from August 10 through December 10, 2007; and

WHEREAS, the DEIS must comply with relevant sections of the National Environmental Policy Act (NEPA) and its implementing regulations, as well as several other state and federal environmental laws; and

WHEREAS, all three of the practical alternatives studied in detail in the DEIS (including the preferred alternative) would inflict massive negative impacts on the County of St. Clair, including the City of Port Huron and the surrounding townships; and

WHEREAS, St. Clair County staff and affiliates have reviewed the DEIS and provided the St. Clair County Board of Commissioners with an extensive report on their assessment.

NOW, THEREFORE, BE IT RESOLVED that the St. Clair County Board of Commissioners hereby declares:

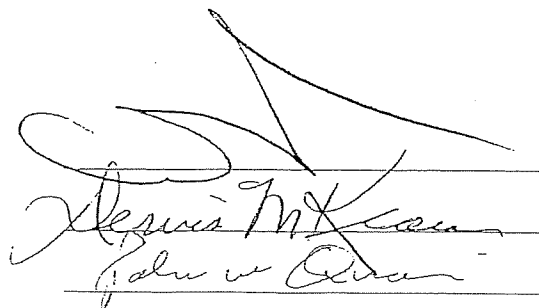
1. The DEIS fails to provide full public disclosure of impacts, does not adequately justify the project's costs/negative impacts, does not evaluate a reasonable range of alternatives, and does not provide adequate mitigation for the massive negative impacts which are anticipated. Details regarding these shortcomings are provided in our official comment letter which is attached to this resolution.
2. Improvements to the I-69/I-94 corridor (including repairs to the Black River Bridge) should be evaluated in separate environmental document as previously planned by MDOT. It is not acceptable to delay improvements to this corridor while issues related to the bridge plaza are studied and debated.
3. The proposed 65-acre size of the plaza facility is not justified based on the information presented in the DEIS. Another alternative with reduced size needs to be evaluated in detail and compared to the three practical alternatives presented in the DEIS.
4. A supplemental DEIS is needed to address the shortcomings of the present DEIS and to assure that there is full disclosure/adequate opportunity for public comment at this stage in the process. It is not acceptable for our concerns to be addressed only in the Final Environmental Impact Statement.

BE IT FURTHER RESOLVED that copies of this resolution be sent to Governor Jennifer Granholm, Congresswoman Candice Miller, U.S. Senator Debbie Stabenow, U.S. Senator Carl Levin, Senator Jud Gilbert, Representative Daniel Acciavatti, Representative Phillip Pavlov, and Representative John Espinoza.

Adopted: December 5, 2007

Reviewed and Approved As To Form By:

Gary A. Fletcher
County Corporation Counsel
522 Michigan
Port Huron, Michigan





COUNTY OF ST. CLAIR



**Blue Water Bridge
Draft Environmental Impact Statement – Review**

Exhibit A

Compiled Comments

By Staff of

**Metropolitan Planning Commission
Health Department
Road Commission
Sheriff's Office
Emergency Management
Parks and Recreation
Equalization
& Drain Commissioner**

Dated: December 5, 2007

**Blue Water Bridge
Draft Environmental Impact Statement – Review**

Compiled Comments

by

Staff of the Metropolitan Planning Commission, Health Department, Road
Commission, Sheriff's Office, Emergency Management, Parks and Recreation,
Equalization and Drain Commissioner

EXECUTIVE SUMMARY

Page 2

- The document should address the current and projected design capacity at some point as it was mentioned here.
 - When and how will MDOT discuss the current design capacity?

Page 13

- Referenced are projections for economic loss due to congestion (\$3.9 billion by 2030, tax base loss (~1.5%), and job relocations. These figures have not, and should be, discussed and justified in greater detail in the document.
 - How and when will MDOT address these projections, and at what point will local agencies and the public be able to review and comment on the findings?

Page 18

- As a goal, storm water discharge should be reduced from current levels, not maintained as suggested in the DEIS.
 - How will MDOT coordinate the management of, to a greater degree than is presently applied, storm water for the project area?

CHAPTER 1 – WHY ARE IMPROVEMENTS NEEDED?

Page 7 – What is the History of the Blue Water Bridge and Plaza Improvements?

- It is our understanding that traffic projections (all traffic) have not met the projections to date; it appears that the Plaza currently handles only 1/3 of the traffic it is designed to handle.
 - Though the primary mission of the plaza seems to be security and not facilitation of legitimate commerce, what will be done to guarantee that, despite the size of the preferred alternative, traffic flow will improve and that the plaza will indeed be able to handle the projected traffic volume? (i.e., What systems improvements are being considered or will be included in the project to accommodate growth and security goals?)

Page 14 – Traffic Growth to the Year 2030

- The second of two traffic projections is viewed as more realistic by staff. The first is assuming economic conditions return to pre-9/11 levels. This is also assuming that the current downward trend in truck traffic is affected by only security issues, and not a shift in cross-border commerce trends. For this reason assuming traffic patterns and projections will grow or decline, and basing capacity needs on these trends is naive. It would be more defensible to opt for an expanded plaza based on security needs rather than traffic projections – security is a factor that cannot be denied or refuted.

Page 20 – Crash Potential

- MDOT should develop projections for increased/decreased crash occurrence once flow is improved on the Blue Water Bridge due to removal of the weave and decreased congestion.
 - What measures will be taken to decrease the severity and occurrence of crashes along the corridor and on the Plaza?

Page 21- Crash Potential

- MDOT should develop projections for increased/decreased crash occurrence once flow is improved along the corridor due to the addition of travel lanes and paved/widened shoulders.
 - What measures will be taken to decrease the severity and occurrence of crashes along the corridor and on the Plaza?
 - What measures will be taken to decrease the severity and occurrence of crashes along M-25 and other intersecting roads along the corridor, which are expected to experience increased traffic counts as a result of this project?

Page 22 – Improving Local Roads and Access to Port Huron

- It is vital to the continued social and economic health of the community that improvements to the condition, access, and placement of local roads be made in conjunction with the Plaza project. The full benefit of an improved Plaza will not be realized if the local network is not optimized.
 - How will MDOT see to it that suitable allowances (either funding or actual improvements) are made to local jurisdictions and transportation providers to ensure that the transportation network (roads and transit) operates at an optimal level?

Page 23 – New Welcome Center

- Safety and security and the proposed Welcome Center should be coordinated in close cooperation with local law enforcement agencies. Due to its proximity with the urbanized areas of St. Clair County, it is possible that “unwelcome” activities could extend to the new Center.
 - What plans are in place and what accommodations will be made to foster interagency safety and security cooperation?

CHAPTER 2: ALTERNATIVES CONSIDERED

Section 2.1 Alternatives Development

- It appears that no public input went into the initial 19 illustrative alternatives. The public was not brought on board until those original 19 concepts were refined into six alternatives.
 - What steps did MDOT take to ensure that the general public had access to and input to the design of the initial 19 illustrative alternatives?

Section 2.2 – Alternatives Carried Forward

- Capacity improvements must be made along the identified segments. Rebuilding these sections of roadway (M-25, Water Street, 10th Street, Lapeer) with the understanding that congestion will be nearing unacceptable levels is unacceptable in itself. Knowing that capacity will be an issue even before a road is constructed is a poor decision. MDOT and FHWA would never allow a local jurisdiction to construct a bridge that would be functionally obsolete at ribbon-cutting.
 - What measures and accommodations to local jurisdictions (either funding or actual improvements) will be made to the local transportation network leading to, from, or around the proposed project area?
 - What road improvements and transit accommodations will be made to facilitate the most affective network possible?
- The usual post-and-panel pre-cast sound walls are unacceptable for this application. More aesthetically pleasing designs must be implemented.
 - To what degree are accommodations available for the design and construction of innovative sound walls?

Section 2.2.3 No-Build Alternative

- This section states that the no-build alternative would not work well because required CBP facilities would not be accommodated. It cites traffic counts and 2030 projections, but does not mention anything about current staffing levels of existing CBP facilities or booths or systems investments their impact on current congestion levels if staffing was increased, and technology or systems investments were made.
 - How would the scope and impacts of the no-build alternative be changed if plaza staffing was increased or altered from its current state?
 - How would the scope and impacts of the no-build alternative be changed if standard operating procedures for plaza staff were changed to alleviate congestion?

- How would the scope and impacts of the no-build alternative be changed if technology solutions were implemented?
- How would the scope and impacts of this no-build alternative be change if border crossing operational system changes were implemented (i.e., increased participation in programs such as nexus and fast pass)?
- The no-build alternative looked at 2030 growth projections.
 - How old are the projections that were used?
 - What steps did MDOT take to validate previous projections and compare the 2030 growth projections that it used to projections made by other entities?
 - MDOT should explain how it analyzed the current lag in the economy and the fact that the city has and continues to lose, not gain population?

Section 2.3 Evaluation of Alternatives

- It appears that no members of the general public or potentially affected neighborhoods were part of the Advisory Committee.
 - What steps did MDOT take to ensure that the general public had representation on the Advisory Committee?
 - What steps did MDOT take to ensure that residents in the Study Area had representation on the Advisory Committee?

CHAPTER 3: THE ENVIRONMENT: WHAT'S THERE NOW AND PROJECT EFFECTS

Section 3.1 - Land Use And Zoning

Finding Statements:

- “No Build” alternative is consistent with local plans and zoning.
- “City East” alternative is not consistent with local plans or zoning.
- “City West” alternative is not consistent with local plans or zoning.
- “Township” alternative is not consistent with local plans or zoning.

- Due to reported projections in increased traffic (not substantiated within section), all three alternatives will create a need to review and modify the Master Plans and Zoning for the project area communities.

- If a build alternative is undertaken, the surrounding businesses are suspected to re-locate in the area: if their market remains stable. Relocation activities by businesses will consume areas of current residential lands. However, the impact of the probable relocation of businesses and associated impacts are not addressed in this section but referred to in section 3.7. Additionally, a conflict with noise, lighting and other visual ordinance language is referred outside the section to 3.10 and 3.8, respectfully. All of these issues have land use implications and should be adequately addressed (as it relates to land use) in this section.

- In general, the format of the section hampers an easy review of the material presented due to the marginalia and inconsistent reporting method. As an example: the final analysis (beginning on page 3.1-7) starts in paragraph format for the “No-Build” Alternative while the “Township Alternative” has been completed in a bullet style.
 - How are the alternative plans incorporating stated goals to preserve community character within St. Clair County?
 - Will any plans to enhance a potential tourism experience be measured against written community plans and ordinances regarding noise, light, odor or any other documented source of pollution? As each alternative will impact local plans and ordinances:
 - What would be the expected expense for each community to incorporate such a development into their plans and zoning: both for the immediate building areas and the impacts due to relocation of businesses?
 - What assistance will be provided to help communities amend their short and long term goals to accommodate such a development project?

- Will project partners work with and provide technical assistance to municipalities to evaluate the project's impact on local comprehensive plans and revise those plans?
- What would be the timeframe and efforts by MDOT to facilitate communities in the process of restructuring their plans to support this plaza development?
- What specific development types (recreational commercial, tourism, vehicle maintenance, food services) would each community need to consider into the future. As stated within the DEIS, the current plans are not sufficient to address expected traffic increases into the future?
- If the expected traffic has not been sufficiently addressed within the current community plans, what areas within the adjacent transportation network may need improvements to handle the future demands both with and without the bridge plaza?

Additional Comments/Questions:

- Are the proposed uses consistent with appropriate Land Use Plans? (Including the communities of Port Huron, Kimball, County)
- Are the proposed uses consistent with current Zoning? (Including the communities of Port Huron, Kimball)
- Is the State required to comply with local planning and zoning? If so, when will the review and approval process begin?
- Are their public lands (owned by City/Township/County) within the footprint of either project? How will the impacts be mitigated?

Section 3.2 - Community and Neighborhood Impacts

3.2.7 How Do People Get Around the Port Huron Area?

- The City West Alternative anticipates a traffic roundabout on the re-routed Pine Grove Avenue, between Scott Avenue, and Mansfield Street.
 - Have pedestrian and bicyclist needs been anticipated for this area?
 - What are the design and operational issues that are being considered for visually impaired pedestrians at this roundabout?

3.2.9 How Will the Alternatives Affect Neighborhoods?

- The Township Alternative will create a vast North-South barrier (perceived or real) along the proposed secure corridor.
 - How does each alternative, and in particular the preferred alternative, minimize the barrier (perceived or real)?
 - What steps will be taken to minimize the barrier during construction of the preferred alternative?
 - Please explain how the community can be assured that there will be no net loss of north/south capacity in the study area during and post construction.

Additional Comments/Questions:

- How many households will be displaced? What communities and neighborhoods are those households expected to relocate to? What impacts might those communities experience as a result of these relocations?
- What are the economic characteristics of those households (not just what the 2000 Census Block data reveals, what does a door to door survey show)?
- Are there existing Low/Mod income subsidized housing units within the footprints? How many units and how many families? How will those housing needs be met if displaced?
- Are there any social, cultural, religious, education based meeting centers such as churches, community centers, etc., within the footprint? If so, how many and how will the displacement of families and these centers impact the services delivered by the centers?
- How many businesses are located within the project footprint? If so, how many and how will the services they provided to the community (at the neighborhood level, city wide, greater community wide) be accommodated in the future?
- Are there historically or culturally significant structures or sites within the project footprint? How are they to be treated and their value to the neighborhood and community be preserved?
- Are there streets and pedestrian systems within the footprint and surrounding area that may be considered or rendered isolated by the user during the construction and after completion of the project?
- Have you identified neighborhood structures and geographic areas that will now have a new 'neighbor' changing their view, value, solitude (sound), air quality characteristics of that structure or area? If so, to what extent will each of those attributes be impacted? Are steps going to be taken to mitigate those impacts and changes? Describe these mitigation activities.
- What type of isolation facility will you have for person(s) suspected of being infected with hazardous communicable disease (i.e. SARS, Avian Flu)? Hazardous communicable disease is a threat to public health for the citizens of St. Clair County and the United States. This has been recognized by the Center for Disease Control, the Office of Homeland Security and local health officials. To limit the risk of infection of the public due to international spread of disease, it is imperative that within the Blue Water Bridge Plaza compound a clinical isolation/quarantine facility is constructed for holding and medical triage of persons entering this country and the U.S. who are suspected of exposure or known to be infected with a hazardous, contagious disease. Holding individuals for interview and triage at the border plaza will provide opportunity for appropriate prevention and treatment measures.
- What type of quarantine/ isolation facility will be available to prevent spread of disease? Current protocols permit temporary quarantine up to 72 hours. How will detainees be accommodated?
- Will there be a first aid station that can double as a quarantine facility with proper ventilation?

- Discuss the expected traffic (2007, 2010, 2020) at the following locations and what steps will be taken in designing the Plaza and Corridor project to ensure existing levels of service will not be reduced at those same locations:
 - M-25 bridge over the Black River Canal
 - Wadhams Bridge over the Black River
 - Wadhams Road from I-69 to Black River Bridge
 - North Street from Wadhams Bridge to Keewahdin
 - Keewahdin from North Street to M-25
 - Lapeer from Wadhams road to I-69
- Are the Black River Bridge improvements, from the bridge into the City, being designed to handle increased traffic capacity traveling both north and south of the plaza?
- Is the plaza being designed to ensure ease of direct access to and from M-25?
- An easy route back into the downtown and Fort Gratiot area from the Welcome Center must be designed into the project. (The Welcome Center will highlight great things to do in the Port Huron area. The project design must not act as an impediment to accessing those community assets.) How will the proposed welcome center location and road connections enhance visitors' experiences through improved access to those areas and attractions most frequented?

Section 3.3 Environmental Justice

- Section 3.3, Environmental Justice, basically implies that minority and low-income residents will not bear any more hardship caused by the bridge plaza construction than any other population group. The 'pain' will be spread evenly among all residents of the study area.
- Document minority and low-income population within the study area by block group.
- How do these figures compare to the community as a whole?

Section 3.3.4 - What are the Effects of Each Alternative on Environmental Justice Populations?

- On page 3.3-7, the DEIS notes that "All residents of the Study Area including minorities and lower income groups will benefit from positive impacts of a potential new Blue Water Bridge Plaza. Potential beneficial impacts include relief of local traffic congestion, increased border safety and security, job creation, and improved economic conditions for businesses that depend on trade."
 - Explain what sort of job creation for environmental justice population will take place in the study area and in the City of Port Huron, as a result of this project?
 - What actions will be undertaken by MDOT to work with other state agencies, local non-profit organizations, and other entities to bring jobs to

the City of Port Huron, particularly the immediate Study Area? When will this work begin? Will there be measurable outcomes established for this effort? Explain how agencies will be held accountable for attaining these measures?

- What are the factors that suggest there is a potential for job creation as a result of each of the four alternatives being considered?
- On pages 3.3-9 and 3.3-11, it states that neighborhood cohesion would be divided and that several businesses would be relocated, which “could present a challenge to the local low-income population to find sufficient alternatives to these departed businesses” and that “low-income residents may be limited in personal transportation options and rely on public transit to reach similar businesses in other parts of the Port Huron area.”
 - What actions will MDOT undertake to work with Blue Water Transit to ensure that low-income residents are able to reach similar businesses in other parts of the region as a result of business relocation?
 - Explain how MDOT will identify alternative businesses and services within a reasonable distance of affected residents.
- This section later states that environmental justice populations will experience the same changes in access, emergency service routes, and minor transit re-routing as everyone else. However, non-environmental justice populations would not be affected in the same way. There seems to be conflicting statements as to the overall impact on low-income residents in terms of changes to public transportation routes and access to businesses that will have to relocate as a result of the project.
 - Elaborate on the mitigation strategy that will be pursued to ensure that minority and low-income populations will suffer no net loss in access to businesses and services.
 - How will each alternative under consideration impact minority and low-income residents in the Study Area that rely on walking to school, work, businesses, or for recreation?
 - How will each alternative under consideration impact the provision of and access to social services in the surrounding neighborhoods, the city of Port Huron, and neighboring townships?
- The document identifies that the City East option will benefit Environmental Justice populations and border crossers with relief in traffic congestion.
 - Provide actual numbers and projections that prove there will be a relief in traffic congestion for environmental justice populations.
- The document identifies that the Township Alternative would result in less minority relocations, because that alternative has fewer relocations in total.

- How will each alternative impact the demographic character of the surrounding neighborhoods? How will the project affect interaction among persons and groups? How will it change social relationships and patterns?

Additional Comments/Questions:

- What are the socio-economic, race, cultural heritage characteristics of the households, businesses and their service population located within the project footprint, within one quarter, one half, and one mile of the expected boundary of the project footprint?
- Identify the 'Environmental Justice' population for the project footprint, within one quarter, one half, and one mile of the boundary of the project footprint?
- Do these numbers indicate that this project will or may affect these populations to an extent greater than the 'non-Environmental Justice' population?
- If there is a predominant affect on the 'Environmental Justice' population, what steps will be taken to mitigate this finding?

Section 3.4 – Economics

- Does the displacement of any businesses within any of the proposed alternatives affect any existing TIF zones or other tax capture areas?
- If so, to what extent and how will the impact be mitigated?

Section 3.4.1 What are the Existing Local Economic Conditions?

- The section covering "Existing Businesses and Economic Activity" is very general and simply lists, in general terms, some of the types of businesses and government buildings that are located in the vicinity.
 - There is actually very little discussion of "local economic conditions" in this section.
 - What impact have recent plant closures or layoffs had on the local economy? In what ways would each alternative under consideration potentially benefit the local economy?
 - What are the current shopping and business patterns within the project footprint? One quarter, one half, and one mile of the boundary of the project footprint? What are the current shopping and business patterns of the population that frequents those commercial and retail centers from a multi-jurisdictional perspective?
 - What existing retail and commercial centers are expected to benefit during construction? What does this impact translate to in terms of jobs and spending?
 - How will each alternative being considered add to resident and visitor experiences to the greater Port Huron area? What measures will be taken to ensure that the experience is enhanced for the life of the improvement?

- Unemployment data is based on 2005 numbers which are now out of date. Update this data to at least the quarter prior to release of the DEIS and provide appropriate analysis.
 - What steps will MDOT take to ensure that there will be no jobs lost as a result of each alternative under consideration?
 - In what ways do the most recent unemployment figures for the City of Port Huron and St. Clair County change the scope and impacts of each alternative under consideration?
- Employment projections and overall economic discussion does not seem to account for the struggling economic times that the city currently faces. DEIS generally mentions the plight of the auto industry.
 - How will the struggling economy and current economic trends change the scope and impacts of each alternative under consideration?
 - What are the effects of current economic trends on local as well as regional Blue Water Bridge Plaza congestion?
- The number of Canadians that cross the bridge to come to work in St. Clair County is based on discussions with “several major employers.” As a result, the number given seems arbitrary and no level of accuracy can be ascertained.
 - What steps did MDOT take to garner accurate figures on the number of Canadians that cross the bridge to work in St. Clair County?
 - Explain the methodology and steps taken by MDOT to identify how many Canadians cross the bridge to go to work in other parts of Southeast Michigan.
 - How many residents of St. Clair County and Southeast Michigan cross the bridge on a daily basis to work in Canada?
 - In what ways would each alternative under consideration encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
 - Describe the impact that the development will have (during construction and upon completion) on the reach of the retail marketplace along M-25 from Main Street Port Huron to the north end retail center in Fort Gratiot Township.
 - How were these impacts determined?
 - How will these impacts be affected by each alternative under consideration?

Section 3.4.3 Assumptions and Methodologies

- In the analysis of the impacts to the tax base, the DEIS states “Future changes in taxable value due to the impacts of a particular alternative on neighboring parcels are not accounted for in the assessment.”

- Not including the estimated changes in taxable value is a major omission and is one of the major purposes of performing the EIS in the first place; certainly similar studies have been performed on major transportation projects which could act as a model for this project.
 - What methodology was utilized to analyze the impacts of each alternative under consideration on the local tax base?
 - Provide the methodology and resulting estimates of taxable value that will be affected by the preferred alternative.
- In the “Job Impact Analysis” section, it states that the study team developed estimates of the jobs that would be relocated, including estimates for relocated jobs where data was unavailable. However, the DEIS does not state what those estimates actually are until later in the report.
 - Elaborate on what steps MDOT will take ensuring that jobs in other areas of the city of Port Huron and St. Clair County will not be adversely affected as a result of the loss or relocation of jobs in the Study Area.
 - Will there be a multiplier effect for job loss in the city and the county?
 - If so, what will that multiplier effect be and how was it determined?
- In the “Cost of Congestion Analysis” section on page 3.4-12, the DEIS simply refers to a 2003 study by Taylor, Robideaux, and Jackson. This section mentions this report, but gives no actual data or findings until much later in Section 3.4.
 - What steps did MDOT take to ensure that the findings of this 2003 study are still relevant today?

Section 3.4.4 How Would a No-Build Alternative Affect Businesses, Taxes, Jobs, and Trade?

- Quite often in the DEIS it refers to negative impacts on trade between the US and Canada due to increasing levels of congestion causing longer delays on the Blue Water Bridge if the no-build option is chosen. However, the DEIS does not do an adequate job of substantiating the claim that congestion will increase.
 - What are the factors that will lead to an increase in congestion?
 - What other alternatives did MDOT examine to effectively manage existing congestion and mitigate projected congestion? Did those alternatives include organizational system or technology solutions? If so, what was considered and what were the conclusions that led to consideration of envisioning the proposed alternatives.
 - What methodology was utilized to deduce that those alternatives were insufficient?

- On page 3.4-13, it states that “other studies have suggested that there will be high job losses unless the Michigan border crossings, including the Blue Water Bridge, are improved.” However, no concrete figures are stated to back this statement up. Instead, the report cites one conclusion from one report.
 - Elaborate and provide a concrete connection between the no-build option being selected and inevitably causing job loss.

Section 3.4.7 How Would the Township Alternative Affect Businesses, Taxes, Trade, and Jobs?

- This section does not include comprehensive analysis of how the City East or City West Alternatives would affect the nearby commercial zones in Fort Gratiot Township or the City of Marysville (during construction or after).
 - Specifically, what are the anticipated impacts to businesses, jobs, and the overall economy in Fort Gratiot Township, Port Huron Township, the City of Marysville and other surrounding communities?
- With the exception of Section 3.4.7, most of Section 3.4 (Economics) deals with impacts to either the Study Area or the City of Port Huron, particularly downtown Port Huron. There is very little analysis of the impacts to businesses, jobs, and the overall economy in Fort Gratiot, Port Huron Township, or other surrounding communities.
 - In what ways will each of the alternatives under consideration impact the economy in Fort Gratiot, Port Huron Township, and other surrounding communities?
 - In what ways will each of the alternatives under consideration potentially benefit the economy in Fort Gratiot, Port Huron Township, and other surrounding communities?
 - What specific employment and industry sectors will be impacted the greatest in these surrounding communities?
 - What sort of multiplier effect will there be on businesses and employees in these surrounding communities as a result of business and employee relocation in the Study Area?

Additional Comments/Questions:

- What is current shopping and business patterns within the project footprint, one quarter, one half, and one mile of the boundary of the project footprint?
- What are the current shopping and business patterns of the population that frequents those commercial and retail centers from a multi-jurisdictional perspective?
- What is the extent of the current geographic area that the potentially impacted shopping and business areas draws from (the market area)?

- How will the construction impacts draw commerce from that market area? What does this impact translate to in terms of jobs and spending?
- After construction, how will the extent of the existing market area be altered? What does this impact translate to in terms of jobs and spending?
- What existing retail and commercial centers are expected to benefit during construction? What does this impact translate to in terms of jobs and spending?
- What new retail and commercial centers are expected to be established after construction? What does this impact translate to in terms of jobs and spending?
- How will local and County Government's share of sales tax revenues be impacted by changes in spending patterns?
- What is the total current revenue from real estate, personal property, and income tax for the project footprint, within one quarter, one half, one mile of the project footprint broken out by taxing jurisdiction?
- How are changes in land use patterns, housing opportunities, consumer spending, expected to impact these current tax revenues (in current dollars projected for periods of one, five, ten, twenty, and thirty years) for the geographic areas described above?
- Are there opportunities for transportation, logistics, warehousing jobs resulting from these public investments? If so, where and when might these opportunities materialize? What incentives is the State and Federal government ready to offer to encourage these jobs and capital investments (both financial and programmatic)? What other types of employment can be expected to materialize from the opportunities that an improved border crossing have been shown to offer?
- There will be a tax-base loss for the County, City and Township. Will the State provide a payment in lieu of taxes for the permanent loss of potential tax base?
- Describe the economic growth that is expected to occur along the Plaza and I-94/69 Corridor in St. Clair County as a result of this public investment and increased border traffic.
- An easy route back into the downtown and Fort Gratiot area from the Welcome Center must be designed into the project. (The Welcome Center will highlight great things to do in the Port Huron area. The project design must not act as an impediment to accessing those community assets.)
- Are there assurances that local contractors or workers will benefit from construction jobs?
- Will the project comply with Davis Bacon and prevailing wage (depressed area) standards?
- Consider constructing the Welcome Center in median between east and west bound I-94. This will aid in ease of returning to the Port Huron and Fort Gratiot areas.
- What is the actual tax revenue that would be lost to the county, cities and townships?

Section 3.5 – Safety and Security

Additional Comments/Questions:

- What are the existing routes used by public safety agencies within and through the project footprint?
- How will these routes be accommodated during the construction period?
- Once completed, what are the expected routes for these agencies both within and through the project footprint?
- How will these changes impact response times, both during construction, and upon completion of the project?
- Will any new specialized response equipment be necessary given the expected facility, equipment, and changes in intensity of use at the plaza and within the corridor?
- Will any assistance be provided for the acquisition, training, and maintenance of this equipment?
- Are current communication and intelligence sharing functions between those agencies with authority on the Plaza and the host communities considered adequate? If not, how will they be improved ensuring protection of international, state, and local assets and populations?
- Will there be a local 24/7, manned, phone number for law enforcement to call during construction, if there are issues?
- If it is vital for security that the plaza be on ground level, how will 10th Avenue be affected as it currently goes beneath both bridges? Will 10th Avenue be closed?
- Describe plans for multiple points of accessibility for emergency response to the hospitals, senior living facilities, and evacuation routing in general through the footprint of the plaza accommodating users that may be north of the plaza.
- Describe facility systems that will accommodate neighborhood alert to release of airborne hazardous materials (i.e., an audible siren system).
- Will fire suppression systems be installed over inspection areas to help contain incidents?
- Describe on-site equipment and material that will be immediately available to respond to hazardous material releases.
- Many people live north of the plaza yet work south of it. What will be done to ensure that those working south will be able to easily access the north end in the event of an emergency at the plaza?

Section 3.6 Relocations

Section 3.6.1 What is the Current Real Estate Market in St. Clair County?

- DEIS indicates that businesses are growing in the Port Huron area, that long-term trends for commercial development in the Port Huron region are positive, and that the presence of the Blue Water Bridge assists businesses in the City of Port Huron. However, no actual numbers are given to support these claims. Instead, they are based on general discussions with realtors.

- Can these claims be substantiated?
- Provide evidence and factual information that supports the notion that businesses and commercial development in the Port Huron region are positive (i.e. expanding).
- In what ways does the presence of the Blue Water Bridge assist businesses in the City of Port Huron and the greater Port Huron area?
- Describe in detail the methodology and source information that points to long-term growth for commercial development in the city of Port Huron and St. Clair County.
- Provide a list of specific businesses that have relocated from the Detroit Metropolitan Region to Port Huron in the past 3 years.
- Provide data and recent trends in home sales for Port Huron from 2002-2007. What have the sales trends been and how have sales prices changed in the past five years?
- How many foreclosures are there in the City of Port Huron? How many foreclosures are there in the Study Area?
- How many households and businesses have already been relocated? Where have these businesses and households relocated to? What type of assistance was provided?
- How many households and businesses are expected to be relocated due to direct expected economic impacts? Due to indirect economic impacts (i.e., changes in shopping habits)?
- How will business relocations affect existing market areas, shopping patterns, and spending patterns? How has the relocation impacted the business and community they moved to?

Additional Comments/Questions:

- How many households and businesses have already been relocated? Where have these businesses and households relocated to? What type of assistance was provided? What steps will be taken to follow-up with those relocated to ensure unanticipated consequences of the move are addressed?
- How many households and businesses are expected to be relocated due to the direct effect of the project (within the proposed footprint)? When are these households and businesses expected to be closed and moved?
- How many households and businesses are expected to be relocated due to direct expected economic impacts? Due to indirect economic impacts (i.e., changes in shopping habits)?
- What communities or neighborhoods within communities are these households and businesses expected to relocate to?
- How will these business relocations affect existing market areas, shopping patterns, and spending patterns?
- How will these household relocations effect existing housing values (both assessed and sales values) in the community or neighborhoods that they are relocating to?

- Are there any expected impacts in those communities that households relocated to such as displacement of existing homeowners, renters, property owners, or through gentrification?
- What type of assistance (financial as well as programmatic) can communities expect to receive to mitigate the impacts of relocation of households and businesses?
- What steps will be taken to create a single point of contact for those households and businesses that are relocated? How long after completion of this project will that office remain open?

Section 3.7 – Indirect And Cumulative Impacts

3.7.3 Description of Development in St. Clair County and the Port Huron Area

- This section fails to identify that Downtown Port Huron is essentially an island and that any changes in traffic flow can have substantial affects on how traffic ingresses and egresses from this 'island'. Furthermore, traffic signal timing has been undertaken in the past to minimize north-south congestion issues between Port Huron and Fort Gratiot along M-25. There is no mention of mitigation to local units to retime or synchronize signals during or after construction of the City East or City West Alternatives.
 1. MDOT says traffic will increase in the coming years.
 2. The current transportation configuration can't handle traffic effectively.
 3. How is it expected to once this "super-efficient" plaza is constructed?
 4. There are very few roads onto and off of the "island" that is Port Huron. What measures is MDOT going to take to mitigate the current/projected congestion along all corridors leading to and from Port Huron?
 5. MDOT can't affectively handle the traffic now – how will it once the plaza is built?

3.7.4 What are the Indirect Impacts?

- There is no mention of how local and County Government's share of sales tax revenues may be impacted by changes in spending patterns as a result of consumers shopping outside of the county to avoid construction congestion. Furthermore any such change in shopping patterns could become permanent as a result of habit even after construction completion.
 - Provide an estimate of the sales tax revenues by community (Port Huron, Fort Gratiot) during construction and after completion of the project.
 - What action will be taken to mitigate expected losses?

3.7.7 How did the Study Team Determine if the Alternatives would have Cumulative Effects?

- There is no mention of the St. Clair County Drain Commissioner's Procedures and Design Criteria for Storm Water Drainage and Development Plans in the list of documents reviewed.

- How would cumulative effects to drains and watercourses be mitigated?

Section 3.8 – Aesthetic and Visual Impacts

Additional Comments/Questions:

- Will existing structures throughout the project (plaza and corridor) reflect the unique character of the host community (define that host community with respect to community character)?
- How will that community character be developed or discovered?
- How will that character be translated into physical elements?
- Will properties currently within sight of the properties to be developed, be protected from this development through design elements? If not, how will the design itself offer that ‘protection’?
- Will an evaluation of development alternatives include a visual preference survey workshop?
- Will an evaluation of development alternatives include proposed viewshed protections that consider unique community, cultural, historical, environmental characteristics present within the project footprint?
- Does a baseline lighting impact study exist? Does such a study consider both spillover to surrounding properties and impedance to view of the night sky?
- How will security lighting be designed and deployed to minimize glare and light spillover into surrounding properties?
- How will lighting throughout the expanded facilities minimize ‘light pollution’ of the night sky?
- How will light pollution be minimized?
- How will noise pollution be minimized?
- What are the facility plans for holding livestock?
- How will animal waste be disposed?
- What odor control measures will be taken for the animal containment facility, and the animal waste?
- Ensure that the retaining and security walls constructed around the plaza and corridor are aesthetically pleasing.
- Construct a public park around the perimeter of the plaza softening the impact of the wall itself and enabling the site to become a community asset.

Section 3.9 – Air Quality

Additional Comments/Questions:

- Have baseline studies been conducted of air quality within the project footprint? Within one quarter or one half mile of the project footprint? When will a “hot spot” air quality study be completed and will it include a base line measure as

- well as measures expected during construction, upon completion, 5 years, 10 years, 20 years into the future? What are the results of these studies?
- How will the proposed projects impact the findings of the baseline study?
 - What are projected air quality findings five years after completion of the project? Ten years? Twenty years? Thirty years?
 - What steps will be taken to mitigate any decreases in air quality (increases in measurable amounts of target gases and particulates)?
 - What steps will be taken to protect surrounding land uses from adverse impacts of decreased air quality and increased particulate materials? What systems will be deployed to alert the surrounding community of air quality emergencies?
 - Are expected air quality levels in line with standards established for the community and region by SEMCOG, Michigan DEQ, and US EPA? (Upon completion of construction, five years, ten, twenty, and thirty years after completion.)
 - Since there is parking for 200 semi-trucks, what policy will be utilized to control carbon monoxide emissions?
 - St. Clair County is currently on the non-attainment list for the 8-hour Ozone levels. What measures will be taken to assure that the project will not add to the problem?

Section 3.10 – Noise Impacts

Additional Comments/Questions:

- Have baseline measures been established at the Plaza and throughout the corridor?
- Do these measures fall within acceptable ranges for adjoining neighborhoods as established by City and Township ordinances? Do they meet State (MDOT, MDEQ, MIOSHA) standards?
- What land uses surrounding the project area will be most affected by noise issues?
- How will MDOT work with those entities to ensure that they are involved in Context Sensitive Solution development?
- What are the projected noise levels at the edge of the proposed footprint and within a quarter mile of the footprint for five, ten, twenty, and thirty years into the future based on anticipated traffic growth and known technology.
- Will these levels meet existing City and Township standards?
- How will construction activities be managed to minimize noise in surrounding neighborhoods?
- What steps will be taken to minimize the impacts of noise on surrounding land uses, residents, and businesses?
- How will noise levels be monitored at the plaza boundaries during normal operations? What steps will be taken to reduce noise levels during normal operations when they are found to exceed acceptable standards?

Section 3.11 – Groundwater, Drainage, and Surface Water Quality

Additional Comments/Questions:

- What groundwater aquifers exist within the study area? What direction do these waters flow in? How many water wells in the 'down-stream' direction exist?
- What construction activities are expected to occur which could threaten the quality or quantity of groundwater within the study area and down-stream? (i.e., driving pilings, footings, test boring, etc.)
- Do groundwater recharge areas exist within the study area? Within the drainage basin that includes the study area?
- What effect will construction and changes in land use have on those recharge areas, both the quantity and quality of the water in the drainage basin?
- What groundwater wells exist in the project study area? What measures will be taken to ensure the integrity of that source of water during construction and upon completion of the project?
- What monitoring systems will be put in place during the construction phase to ensure the quality of groundwater used for drinking water is not compromised?
- What County and natural drains exist within the drainage basin of the study area?
- What impact will changes in land use and construction have on the quantity and quality of storm water that ends up in those County and natural drains?
- Are the proposed developments consistent with and will they be designed in a manner as to support existing storm water plans, watershed plans, land use, and infrastructure plans that exist? What such plans have the project partners reviewed?
- Are the proposed construction practices and development plans consistent with the County's Storm Water Permit and Storm Water Pollution Prevention Initiative (SWPPI)? The City's SWPPI?
- What steps will be taken to ensure compliance with the SWPPI and County Storm Water Permit?
- Have the project partners begun discussions with the Drain Commission? With the County Storm Water Coordinator?
- What Best Management Practices will be implemented during construction to ensure storm water discharges from the site are not contaminated with trash, hydrocarbons, sediment, and heavy metals?
- What Best Management Practices will be implemented to prevent degradation of storm water quality and increased storm water discharge to local surface waters after construction and during normal site operations?
- What monitoring of storm water outfalls will be implemented prior to, during and after construction to ensure storm water quality is not degraded and the quantity of storm water is not increased to local surface waters?
- What measures will be taken if monitoring determines storm water discharges from the project site are degraded in quality or increased in quantity?
- St. Clair County, the City of Port Huron, Port Huron Township and Kimball Township have all participated in the development of the Northeastern Watersheds Management Plan and must meet the goals and objectives of this plan for purposes of compliance with NPDES Phase II Storm Water regulations. How

will this project meet the following related goals and objectives of the Northeastern Watersheds Management Plan?

- Goal 2: Ensure sustainable growth and development.
- Goal 3: Protect and improve water related recreation.
 - Objective 3.1 Reduce sediment loading and associated turbidity
 - Objective 3.7 Minimize chemical spills and ensure proper notification of spills.
- Goal 4: Protect and improve the warm water and cool water fishery and conditions for other indigenous aquatic life and wildlife.
 - Objective 4.1 Reduce sediment loading and associated turbidity.
 - Objective 4.3 Stabilize hydrologic flows.
 - Objective 4.4 Enhance and protect riparian areas and in-stream habitat.
 - Objective 4.8 Minimize chemical spills and ensure proper notification of spills.
- Goal 5: Protect public health and the drinking water supply (public and private).
 - Objective 5.5 Minimize chemical spills and ensure proper notification of spills.
- Goal 7: Increase recreational opportunities (parks and other facilities), including public access to Lake Huron, the Black River, and the St. Clair River.
 - Objective 7.1 Work with regional, county, and local governments, and other agencies and organizations to increase water-related recreational opportunities throughout the watershed while protecting water resources from degradation.
 - Objective 7.2 Seek out and act on opportunities for additional parks and recreational spaces, with priority along stream and riparian corridors, and greenway corridors.
 - Objective 7.3 Provide additional public access to water resources.
- Goal 8: Maintain and/or increase the aesthetics of the water resources
 - Objective 8.1 Reduce sediment loading and associated turbidity.
 - Objective 8.3 Stabilize hydrologic flows.
 - Objective 8.4 Enhance and protect riparian areas and in-stream habitat.
 - Objective 8.5 Minimize chemical spills and ensure proper notification of spills.

- Will the project implement any Post Construction Best Management Practices, such as Low Impact Development practices, that will encourage the infiltration and natural filtration of storm water?
- Will the project incorporate Leadership in Energy and Environmental Design (LEED) standards into the construction of the proposed facilities?
- Is there any planning as to how environmental spills will be contained?
- Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.
- Will there be sump pumps operated for potential high ground water levels? What if any adverse effects will that have on adjacent properties?
- Will ‘green’ building and site design standards for on-site storm water treatment be implemented?
- Will all on-site storm water from the corridor project and plaza include cleaning and polishing of all run-off and maintain existing release rates from the sites?
- What plans are in place for the snow removal from the corridor and plaza?

Section 3.12 – Floodplains

Additional Comments/Questions:

- Has an evaluation been made of flood elevations and potential development within the floodway?
- What steps will be taken to ensure compliance with Federal, State, and local flood regulations?
- How will construction activities and resulting development affect the flow of floodwaters within the study area?
- How much additional water run-off will be contributed to the floodway within or adjacent to the study area during construction and upon completion of the projects?

Section 3.13 – Wetlands

Additional Comments/Questions:

- How and by whom will a wetlands inventory be conducted? If appropriate, how will an appeal or conflicting findings with other inventories conducted by a reputable source be received, acted upon, and resolved?
- What wetland types exist within the project study area?
- What wetlands will be directly impacted by construction and subsequent development? How many acres of wetland, what type of wetlands?
- What steps will be taken to minimize impacts on wetlands both direct impacts and indirect?
- If there is mitigation involved, will it take place within the same watershed? If not, what are the reasons for looking elsewhere for mitigation?

- How will project partners work with community leaders that will host mitigation activities? What reviewing authority will the project partners offer to the host community?
- How will wetland development and mitigation activities affect groundwater and surface water quality and quantity within the host watershed(s)?
- Are there plans to minimize the adverse impacts of this development and mitigation activity? What will they consist of?
- If mitigation activity occurs, what efforts will be made to monitor those activities to ensure the success of that activity and future viability of the mitigation activity?
- What type of monitoring will be implemented on wetlands before, during and post construction to determine impacts?

Section 3.14 – Plants, Wildlife, and Threatened and Endangered Species

Additional Comments/Questions:

- What methods were used to identify valuable plants and wildlife, and threatened and endangered species before the project is constructed? Exist within an 'impact area' outside of the immediate boundaries of the study area?
- If appropriate, how will an appeal or conflicting findings with other inventories conducted by a reputable source be received, acted upon, and resolved?
- What threatened or endangered species of plants or wildlife exist within the study area? Within an indirect impact area adjacent to the study area? Will the project impact any valuable plants and wildlife or threaten and endangered species?
- What steps will be taken to permanently protect and preserve those threatened or endangered species that are found to exist within or adjacent to the study area?
- How will efforts to protect and preserve those areas set aside for permanent protection and preservation be monitored?

Section 3.15 – Cultural Resources

Additional Comments/Questions:

- What efforts are being made to reach out to local entities that can assist with identifying historically and culturally significant sites and structures?
- Will contact be made with the local historical society, Port Huron Museum?
- What opportunities will be provided to involve representatives of native peoples who populated the area?
- What steps will be taken to protect and preserve those historic and culturally significant structures within the study area?
- Describe plans to install interpretative signage and memorials honoring historically and culturally significant land uses, structures, activities that may have occurred with the study area which will no longer be readily accessible to the public.

Section 3.16 – Potential Contaminated Sites

Finding Statements:

Each alternative will include sites of Recognized Environmental Conditions (RECs). The report does not include sufficient information to complete a thorough decision without consulting the work papers. Upon reading the written work papers, several items are of concern:

- Both on-site and adjacent area reports included recommendations for further study [Phase II ESA]. The DEIS should-not require “further study,” but be conclusive in its findings.
- Buried oil storage tanks for heating prior to the introduction of natural gas may remain within the project areas. Note: 1937 aerial shows houses removed for the initial span of the Blue Water Bridge. These homes likely used oil tanks.
- Hazardous Materials Routes were not identified and reported as a REC. In addition, the current and future truck parking areas were not listed as temporary storage areas for chemicals of environmental concern. As past history may indicate, spills can occur on or around the bridge facility. The public should be aware of these transient risks just as those with a fixed location.
- Historical Review does not clearly state: “no additional sites were identified” instead the report only states “...identified many of the same sites...”
 - How can this EIS be complete if further research has been indicated in the form of Phase II Site Assessments?
 - In the absence of the recommended Phase II Site Assessments, how would the worst case scenario of each site be addressed?
 - What would be the cost and remediation efforts for each worst case scenario?
 - The reports indicated residential homes were present prior to the introduction of natural gas. How many heating oil storage tanks may remain in the area?
 - If tanks are found, what is the plan of action for this possibility?
 - Were tanks removed for the prior bridge construction projects?
 - If not, what is the plan to remove those tanks?
 - Why did the report not include known transportation routes as potential environmental conditions?
 - What are the impacts of the transportation routes and temporary storage facilities?
 - What are the plans to address the loss of containment of materials in transit or awaiting inspection?

3.16.2 Will the Alternatives Affect any Contaminated Sites?

- Under the Mitigation section it states, “Under any of the Alternatives, a Phase II subsurface assessment will be needed to further investigate the contamination at the REC sites... Depending upon the findings of the Phase II assessment, it may be necessary to perform further investigation or remediation.”

- Why does the EIS require further study of REC sites?
- What would be the mitigation recommendations of contamination identified in any Phase II studies?

Additional Comments/Questions:

- What potentially contaminated sites have been identified within the study area?
- To what extent will those contaminants be remediated?
- Will there be an opportunity for respective local governmental oversight of the cleanup activity?
- Describe assurances that will be provided to the local governmental agency with jurisdiction of the site that contaminants discovered or remaining at the site after construction, will not migrate off site. What steps will be taken to monitor the presence and migration of contaminants during construction and once normal operations at the site resume?

Section 3.17 – Farmland

Additional Comments/Questions:

- How much prime and important farmland (as defined by the Natural Resource Conservation Service and/or the USDA-SCS Important Farmlands of St. Clair County Map dated October 1979) will there be permanently rendered unavailable for agricultural activities as a result of this project?
- What steps will be taken to permanently protect an equal amount of prime or important farmland in another area of the county?

Section 3.18 – Wild and Scenic Rivers

Additional Comments/Questions:

- What steps are being taken to permanently ensure public access to the Black River and other rivers or streams within the study area, to the same extent as is currently offered?
- What steps can be taken to increase or enhance access on a permanent basis?
- How will storm water run-off from the roadway be detained and treated to ensure contaminants will not enter the waterways within the study area?
- How will release of hazardous materials be detained and recovered ensuring that it will not enter the waterways of the study area?

Section 3.19 – Coastal Zone

Section 3.19.3 Will the Project Affect the Coastal Zone?

- There is no mention of recommended mitigation activities as a result of lengthening the piers located in the Black River.
 - How would increased rates of sedimentation originating from pier work in or near the river be mitigated?
 - What are the potential impacts to river and near-shore habitat from work being done to lengthen the piers?
 - How would these impacts be mitigated?

Additional Comments/Questions:

- What portions of the project are within the Coastal Zone as defined by the DEQ, NOAA, and or the EPA?
- What impacts are expected to occur within those coastal zones? What steps will be taken to mitigate those impacts?

Section 3.21 – Construction Impacts

Additional Comments/Questions:

- Describe the proposed construction timeline and annual calendars.
- What steps will be taken to ensure that constant access to neighborhoods and business areas on either side of the project at levels currently experienced, will not be compromised by construction activities? Are such disruptions expected and if so describe them.
- What resources will be made available for residents and visitors to quickly and easily access information on current construction activities, delays, and upcoming disruptions to existing systems?
- Describe the signage (placement and content) that is expected to be erected throughout the county to prepare and inform residents and travelers of the detours, bypasses, alternate routes, delays, and confusion in general that they will likely encounter? Provide a timetable for installation of signage.
- What other outreach efforts will be made to inform the community and visitors?
- Describe the impact that construction is expected to have on public transit routes, pick-up sites, and timetables.
- What measures will be taken to ensure pedestrian and other non-motorized access around and through the construction site during the construction period? How will those routes be determined? How will they be posted or designated?
- How will construction noise, dust, fumes, be minimized as to respect and protect the health and safety of those in surrounding neighborhoods?
- Will MDOT identify one central office and person that will be assigned the duty of receiving and responding to complaints and concerns that are filed by residents and visitors? How will the public and visitors be made aware of this individual's

telephone number? Will a web site be established to provide the public with information on project schedules, current traffic delays caused by construction, and allow questions or complaints to be filed and monitored?

- How will complaints be responded to?
- What avenues will there be available for someone to appeal a decision made on a complaints?
- Will this individual be available 24 hours a day? If not, what provisions will be made to receive and respond in a timely manner to complaints filed during 'off' hours?
- Will construction impede boat traffic on the Black River?
- Explain how construction will affect 10th Avenue, Gratiot, Hancock, etc.? How will traffic be routed around these areas and for how long?
- Consider constructing the Welcome Center in median between east and west bound I-94. This will aid in ease of returning to the Port Huron and Fort Gratiot areas.
- Will clearances from the Black River surface to the underside of I-94 bridges be maintained or increased to allow passage by boats?
- Will construction impede boat traffic on the Black River?

Section 3.22 The Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

- Describe the impact that the development (during construction and upon completion) on the reach of the retail marketplace along M-25 from Main Street Port Huron to the north end retail center in Fort Gratiot Township.
- How were these impacts determined?
- Define the existing retail market reach for retail centers north and south of the existing plaza from Griswold to the north end retail center in Fort Gratiot. How were these market studies completed?
- Describe how consumer trips and shopping patterns within these two retail centers are expected to be affected upon completion of the plaza project, and during the construction period.
- Translate these resulting affects into spending and employment estimates.
- What areas of the county can expect to see retail development resulting from a shift in shopping patterns?
- What economic opportunities might the community realize as a result of this plaza project?
- Translate those opportunities into industries, employment classifications and numbers, and overall economic impact in dollars.
- Describe the assistance that MDOT and its project partners will provide to the community to realize the economic opportunities that have been identified. (Programmatic and fiscal)
- Identify the minority and low income households in the study area. (Since the US Census is seven years old we would encourage a door to door survey be

conducted of the study area and within a reasonable distance surrounding the study area.)

- Identify health or human services delivery centers within the study area and within one quarter mile of the study area.
- How will these delivery centers be affected by the relocation of low and moderate income households?
- How will relocated health and human service center consumers be affected by relocations?
- What steps will be taken to ensure no reduction in service levels or availability to consumers or health and human service providers?
- Describe changes that may occur within existing public transit routes as a result of the proposed project.
- What assistance will be provided (financially and programmatically) to ensure access to the transit system for riders and access to routes by the transit agency upon completion of this proposed project?
- What steps will be taken to enhance existing non-motorized access through this proposed project area?
- How will plaza and roadway design be accommodated to enhance existing local access provided to travelers and visitors on I-94/69 and across the Blue Water Bridge?
- How will the proposed project add to resident and visitor experiences to the greater Port Huron area?
- What measures will be taken to ensure that the experience is enhanced into the future?
- Describe the social and cultural disparities that could evolve as a result of the physical obstacles that this proposed project will define through emphasis of a north and south end of the community?
- What steps will MDOT take in the design of the facility to strengthen community and neighborhood unity across this physical line of demarcation?

Additional Comments/Questions:

- Describe the impact that the development (during construction and upon completion) on the reach of the retail marketplace along M-25 from Griswold to the north end retail center in Fort Gratiot Township, Metcalf Road. How were these impacts determined?
- Define the existing retail market reach for retail centers north and south of the existing plaza from Main Street Port Huron to the north end retail center in Fort Gratiot. How were these market studies completed?
- Describe how consumer trips and shopping patterns within these two retail centers are expected to be affected upon completion of the plaza project. Translate these resulting affects into spending and employment. What areas of the county can expect to see retail development resulting from a shift in shopping patterns?
- What economic opportunities might the community realize as a result of this plaza project? Translate those opportunities into industries, employment classifications and numbers, and overall economic impact in dollars.

- Describe the assistance that MDOT will provide to the community to realize the economic opportunities that have been identified. (Programmatic and fiscal)
- Identify the minority and low income households in the study area. (Since the US Census is seven years old we would encourage a door to door survey be conducted of the study area and within a reasonable distance surrounding the study area.)
- Identify health or human services delivery centers within the study area and within one quarter mile of the study area. How will these delivery centers be affected by the relocation of low and moderate income households? How will relocated service center consumers be affected by relocations? What steps will be taken to ensure no reduction in service levels or availability to consumers or service providers?
- Describe changes that may occur within existing public transit routes as a result of the proposed project.
- What assistance will be provided (financially and programmatically) to ensure access to the transit system for riders and access to routes by the transit agency upon completion of this proposed project?
- What steps will be taken to enhance existing non-motorized access through this proposed project area?
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- How will the proposed project add to resident and visitor experiences to the greater Port Huron area? What measures will be taken to ensure that the experience is enhanced into the future?
- Describe the social and cultural disparities that could evolve as a result of the physical obstacles that this proposed project will define through emphasis of a north and south end of the community? What steps will MDOT take in the design of the facility to strengthen community and neighborhood unity across this physical line of demarcation?

Section 3.23 – Permanent and Lasting Commitments of Resources

- After construction, how will local response agencies be alerted to spills or release of hazardous substances?
- How will surrounding neighborhoods be made aware of releases of hazardous substances? (i.e., alert sirens)
- What support will there be provided to local response teams after construction for activities related to release of hazardous substances within the study area?
- What support will be offered to compensate for permanent adjustments to transit routes and access to transit by riders?
- What long-term and permanent steps will be taken to minimize the adverse effects of lighting, increased noise, and a growth in noxious fumes around the plaza and the corridor? Where can complaints be filed and how can they be expected to be responded to?

- On page 3.23-2, the DEIS states that the commitment of various resources is “based on the concept that residents in the local region around the Blue Water Bridge Plaza, the State of Michigan and Province of Ontario, and the United States and Canada will benefit from these improvements.” However, there does not seem to be a lot of substantive data to support the concept that these entities are benefiting from the preferred alternative. In many cases, the potential or perception of benefits is discussed – not actual proof of benefit.
 - Elaborate and provide objective evidence that the City of Port Huron, the surrounding communities, the relocated residents and employees, the State of Michigan, the United States, and Canada will actually benefit from these improvements.

Additional Comments/Questions:

- After construction, how will local response agencies be alerted to spills or release of hazardous substances?
- How will surrounding neighborhoods be made aware of releases of hazardous substances? (i.e., alert sirens)
- What support will there be provided to local response teams after construction for activities related to release of hazardous substances within the study area?
- What support will be offered to compensate for permanent adjustments to transit routes and access to transit by riders?
- What long-term and permanent steps will be taken to minimize the adverse effects of lighting, increased noise, and a growth in noxious fumes around the plaza and the corridor? Where can complaints be filed and how can they expect to be responded to?

Section 3.24 – Energy/Sustainability

Additional Comments/Questions:

- How will this project impact energy consumption for the immediate neighborhoods? For the city? For the neighboring townships?
- What kinds of energy will be used to meet the completed project’s energy needs? Describe whether it will be used for heating, manufacturing, etc.
- What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.
- Will the project result in solar power interference where nearby properties will be shaded as a result of the proposal? If this may occur, please describe which properties will be affected and the degree this is likely to occur?
- What steps will be taken to maximize energy efficiency for structures and amenities at the project site?

CHAPTER 4 – SECTION 4(f) AND 6 (f) EVALUATION

Section 4.4 E.C. Williams House

Section 4.4.2 What are the Project impacts on the E.C. Williams House?

The City West Alternative will require the full acquisition of the property and relocation of the historic building – MDOT has proposed relocating the house from its historic location to preserve the structure, but the SHPO has determined that this will constitute an Adverse Effect on the property, although it is preferable to demolishing the house. Mitigation efforts have been established through the coordination of MDOT and FHWA with SHPO. SHPO has requested additional work be done to ensure that adverse effects of the project are adequately addressed.

- Additional work by MDOT and FHWA should be completed and SHPO issues resolved as it relates to each alternative prior to issuance of the final EIS and selection of a preferred alternative.
- Describe outstanding issues as defined by SHPO.

CHAPTER 5 - MITIGATION

Mitigation chapter is severely lacking substantial content. Most of the language speaks in generalities and does not offer specific mitigation actions for specific impacts.

The DEIS mentions that further mitigation issues will be explored. Those issues should have been explored in this DEIS.

- All mitigation issues mentioned as needing further exploration should be resolved and documented prior to issuing the final EIS and selection of a preferred alternative.

Section 5.2 – How Are Right-Of-Way Acquisitions And Relocation Impacts Mitigated?

- What “appropriate measures” will be taken to ensure that all eligible displaced individuals/businesses/non-profit organizations are advised of the rights and benefits available and course of action open to them?

Section 5.3 How Are the Aesthetics and Visual Conditions Mitigated?

- DEIS states “Mitigation of aesthetic and visual impacts **could** come in many forms. Some of the more common measures **could** include...” The bulleted-list following this lead-in are simply generic mitigation measures that could be considered down the road.
 - What specific actions will MDOT take to mitigate adverse impacts to the aesthetic and visual character of the plaza, the surrounding neighborhood, and the overall character of the city?
 - How will MDOT ensure that viewsheds, historical entities, and cultural resources are protected and/or enhanced?
 - How will community character be developed or discovered by MDOT?
 - How will that character be translated into physical elements?
 - What efforts are being made to reach out to local entities that can assist with identifying historically and culturally significant sites and structures?
 - How will properties currently within sight of the properties to be developed be protected from this development through design elements?
 - How will the design itself offer that ‘protection’?
- There are no specific mitigation measures mentioned to prevent light pollution aside from some general lighting discussion in Section 3.8 earlier in the DEIS. There are no specific mitigation measures discussed to deal with managing storm water on a footprint that will increase impervious surfaces. There are no specifics given for mitigating adverse impacts to air quality or other environmental resources. There are no mitigation specifics for the adverse impacts to businesses

in both Port Huron and its surrounding communities, particularly the north end, which will be “cut off” by the expanded plaza.

- What specific mitigation actions will be taken to minimize potential hazards, increased storm water runoff as a result of increased impervious surfaces, lighting, air quality, noise, vibration, sound, and wildlife habitat?
 - What specific mitigation actions will be pursued to ensure that local businesses in Port Huron, Fort Gratiot, Port Huron Township, and other St. Clair County communities will not be adversely affected as a result of each alternative that is under consideration?
 - Have baseline studies been conducted of air quality within the project footprint?
 - Within one quarter or one half mile of the project footprint?
 - What are the results of these studies? What steps will be taken to protect surrounding land uses from adverse impacts of decreased air quality and increased particulate materials?
 - What systems will be deployed to alert the surrounding community of air quality emergencies?
 - How will construction activities be managed to minimize noise in surrounding neighborhoods?
 - What steps will be taken to minimize the impacts of noise on surrounding land uses, residents, and businesses?
- Lighting: A photometric plan must be developed that minimizes light intrusion. A plan that significantly reduces light intrusion from its current level should be targeted.
 - What specific measures will be taken to guarantee that light pollution is reduced from its current levels? All means available should be employed to guarantee that effective lighting be installed that also reduces light pollution, off-site and overhead.

Additional Comments/Questions:

- Design and construct a plaza and gateway corridor that is respectful of and sensitive to the natural and built environment, as well as the heritage of the area.
- Create a facility that projects Michigan’s and the region’s heritage, that illustrates progress, that welcomes visitors and sets the state for their trip to the U.S., Michigan, and St. Clair County. Do not design and build a facility that resembles a “check-point”, a warehouse, a storage yard/depot, or has an industrial feel to it.

Section 5.4 How Will Air Pollution be Controller During Construction?

- Particulate Matter 2.5 emissions: The implementation of a construction emissions reduction plan **must** be considered to target emissions from construction sources.

- How will MDOT guarantee that such a plan is developed and implemented at the project location for the duration of construction?
- Nuisance Odors: Contractors must be required to use methods to control nuisance odors and unnecessary air pollution associated with diesel emissions from construction equipment.
 - How will MDOT guarantee that such a plan is developed and implemented at the project location for the duration of construction?
 - Will one central local office be identified to receive and respond to complaints? How will that information be distributed to neighbors and host municipalities?

Additional Comments/Questions:

- What mitigation steps will be taken to ensure that increased traffic and 'stacking capacity' does not degrade existing air quality?

Section 5.5 – How Will Traffic Noise be Mitigated?

- Much attention must be paid to ensuring the positive aesthetic quality of any noise barriers, keeping in mind the national and local economic significance of this corridor.
 - To what degree are accommodations available for the design and construction of innovative sound walls? When practical, where and how will berms and natural sound barriers (trees) be applied to mitigate noise pollution?

Section 5.6 – How will Noise and Vibration be Controlled During Construction?

- Independently performed basement surveys should be honored for those residences/businesses that are not identified by MDOT to be prone to construction-related vibration damage.

Section 5.7 – What Measures Will Be Taken To Protect Water Quality?

- While scupper drains will not be used on the bridge portion over the Black River, storm water runoff will be collected and channeled down the slope adjacent to the river.
 - What kind of pretreatment of this runoff (i.e., vegetative controls) would be utilized prior to it being introduced directly to the river?
 - What kind of unique design alternatives will be considered for storm water detention basins constructed under any of the considered alternatives? In other words, will detention resemble anything other than your typical

‘water placed in jail’ design where detention basins are designed void of aesthetics and surrounded by fences?

Section 5.9 – What measures will be taken to Protect Floodplains, Streams, and Drain Crossings?

Additional Concerns/Questions:

- How will impacts to the floodplain(s) be mitigated?
- How will floodplain mitigation be monitored for success?
- How will unsuccessful flood plain mitigation be corrected if it is determined to be unsuccessful?
- How will successful floodplain mitigation be determined?

Section 5.11 – How are Wetlands Mitigated?

- There is no consideration given to the option of Wetlands Preservation credits which, under Michigan law, allows low-quality wetlands to be mitigated by the purchase of existing high-quality wetlands that will be permanently protected by Conservation Easement. While this requires mitigation at a 10:1 ratio, it could be quicker and less costly than trying to construct man-made wetlands for mitigation.

- Why is this mitigation option not discussed in this section?

Additional Concerns/Questions:

- What type of mitigation will be implemented if wetlands are destroyed or impacted?
- Will mitigated wetlands remain within the project area so impacts are minimized? Will they at least remain within the subwatershed?
- Will walkways, signage or other education initiatives be incorporated into the construction of any mitigated wetlands so that the public will be encouraged to learn about the importance of wetlands?
- How will mitigated wetlands be monitored and maintained for perpetuity, especially in regards to invasive plant species like *Phragmites australis* which is a severe problem for the area?
- Allow the community to develop wet lands of marginal value at an offset ratio equal to 3 acres for every one acre of land (upland as well as wetland) that is taken by the project.

Section 5.12 through Section 5.14

Additional Comments/Questions:

- What measures will be implemented to mitigate any impacts to valuable plants and wildlife or threatened and endangered species?

- Will mitigation for Valuable Plants, Wildlife, and Threatened and Endangered Species remain within the project area?
- How will invasive plants species be deterred from invading impacted areas along the Black River?
- Will native plant seed be used to stabilize impacted areas?
- Will native plant species be incorporated into landscaping areas of the project?

Section 5.17 – How are Hazardous/Contaminated Materials Mitigated?

- While the DEIS speaks of further needed study or Phase II Environmental Site Assessments of listed RECs it does not identify a public process for input on remediation recommendations as an outcome of any findings.
 - How would the public be allowed to provide input on remediation recommendations as an outcome of any findings?
 - Further study of Phase II assessments should be completed prior to release of the final EIS and selection of a preferred alternative.

Section 5.18 – How are Surplus or Unsuitable Materials Disposed?

- St. Clair County's Solid Waste Management Plan does not allow for the exportation of any solid waste generated within the County to any facilities outside of the county for the purpose of disposal. This section does not identify this regulation.
 - How and where will solid waste generated during the construction process be disposed of?

Section 5.23 – Additional Mitigations or Modifications

Additional Comments/Questions:

- Can funding be provided to assist in marketing the area through the local tourism bureau?
- Provide incentives to stimulate and establish an environment that is supportive of businesses that typically grow from opportunities offered through improved border crossing infrastructure.
- Provide permanent source of funding to local communities that will be hosting and providing services, as well as losing tax revenues, to the project area and those areas affected by this project.
- Describe the assistance that would be available to complete the installation of an interoperable communication system allowing federal, state, and local agencies in and around the plaza to communicate with one another.
- Will funds be available to assist in the construction of an ambulance garage at the north end (perhaps Mercy Health Center)?

- Will there be assistance for establishing a Trauma Center north of the plaza to be used in the event of an emergency?
- Formalize a bypass around the plaza connecting the community of Wadhams with Keewahdin and M-25.
- Describe the funding and technical assistance that would be available to the community to assist in developing and implementing an access management plan along M-25 between downtown Port Huron and Metcalf Road.
- Formalize the “signed” M-25 alternate route and work with the appropriate local road agency to develop the resources necessary for long-term maintenance of this alternate route.
- Attain the intended goals of the M-25 and adjoining roads Intelligent Traffic System (I.T.S.) including the integration of timing of traffic control devices in this corridor.
- Widen the M-25 bridge over the Black River Canal to accommodate one additional lane in both directions.
- Consider the development of a water ferry system to move people up and down the Black and St. Clair Rivers.
- Allow the community to develop wetlands of marginal value at an offset ratio equal to 3 acres for every one acre of land (upland as well as wetland) that is taken by the project.
- How will the destruction of public recreational access to the Black River be mitigated?
- How will increased public recreational access to the Black River be incorporated into the project?

Project Mitigation Summary “Green Sheet”

- A certain degree of positive aesthetics should be guaranteed.
- This opportunity should be taken to establish an upgraded noise barrier system more aesthetically appealing than that currently in use along major transportation corridors throughout the state. This does not imply a more costly solution; only a more creative one.
- Included in the MIP must be a coordination plan with local transit providers (BWATC). Blue Water Bus must be involved early in the process to minimize any disruption in services provided.

APPENDIX A: LISTING OF TECHNICAL REPORTS

Section 8 – Wetland Delineation and Functional Assessment Report

- The list of recommendations/observations does not include any discussion of Wetlands Mitigation Preservation Credits which, under Michigan law, allows low-quality wetlands to be mitigated by the purchase of existing high-quality wetlands that will be permanently protected by Conservation Easement. While this requires mitigation at a 10:1 ratio, it could be quicker and less costly than trying to construct man-made wetlands for mitigation.
 - Why is this mitigation option not discussed in this section?

Issues to consider:

- North-South community barrier (perceived or real) will be minimized through the chosen alternative and appropriate design elements.
- Local/County Plans and Zoning will be drastically affected. No mention of mitigation for new planning and zoning is provided MDOT and FHWA should work with host municipalities to adjust plans as necessary.
- Current inspection booths are not staffed to capacity at peak travel times. Is there a commitment by CBP that higher numbers of inspection booths would be staffed during peak travel times?
- The Canadian side of the bridge and the Canadian entrance to the Bridge (off of Highway 402) are routinely staffed by BWBA workers who assist with mitigating traffic flow/congestion problems. Neither the U.S. side of the bridge or the U.S. entrance to the Bridge (off of I-94) is currently staffed by MDOT officials to mitigate traffic flow/congestion problems. (Sometimes there is an MDOT official positioned in a car near the U.S. customs plaza as you approach from the bridge. According to various accounts from local municipal staff who cross the bridge routinely, the individual(s) placed on the side of the bridge near the entrance to U.S. Customs, is nowhere near as effective as their counterparts on the Canadian side of the bridge. Accounts from individuals who have been involved in 30-90 minute traffic tie-ups entering the U.S. from Canada are that delays could easily have been mitigated by someone doing an effective job of directing traffic on the bridge as vehicles approach the customs plaza. Traffic safety is a great concern when drivers are not following sign-designated traffic flow patterns. Again, this could be addressed by having one staff person directing traffic on the bridge where cars are supposed to be in designated lanes (i.e. trucks, nexus, cars).
- Are there any plans to have the U.S. approach to the bridge, and the approach to the U.S. Customs, staffed by individuals who will mitigate traffic flow issues?

APPENDIX B: CONCEPTUAL RELOCATION PLAN

This section simply provides an overview of how many residential, business, and non-profit properties will be relocated. It also mentions that it will follow federal and state requirements in terms of location. There is no discussion on extra efforts that will be made to ensure that relocated families and businesses actually relocate within Port Huron, which could potentially benefit other neighborhoods within the city.

- What steps will MDOT take to ensure that families and businesses that must be relocated will relocate within Port Huron City limits?
- In what ways will MDOT work with other state agencies, local non-profit organizations, local units of government, and other entities to ensure that relocated families and businesses are able to easily relocate to homes and business that are equal to or better than the locations they are losing and within the City of Port Huron?

GENERAL OBSERVATIONS AND COMMENTS

- In several places throughout the DEIS outside studies of information sources are cited but associated findings and data are not included. All cited studies and information sources should be attached to the DEIS and distributed for public review prior to selection for a preferred alternative and release of the final EIS.

Vance, Rhonda K.

From: Davis, Todd J
Sent: Monday, December 03, 2007 3:04 PM
To: Nazar, Christopher R; Zang, Douglas K; Stroupe, Adrian; Vance, Rhonda K.; Lee, Lindsay L.; McCleary, Nicole T.; Lavoie, Douglas A; Wendling, Matthew D.; Hunter, Matthew S; tweston@hntb.com; jjaeckel@hntb.com; Ziegler, Melissa; Holthoff, Bill; Mark Yedlin (myedlin@kldassociates.com)
Subject: DEIS City Comments
Attachments: DEIS Comments from City of Port Huron.pdf

Attached are the comments received from the City of Port Huron. At some point, we may need everyone's help to answer these comments. Enjoy!

Todd

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12/4/2007

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November 30, 2007

Mr. Bob Parsons
Public Hearings Officer, MDOT
P.O. Box 30050
Lansing, Michigan 48909

Re: Blue Water Bridge Plaza Study Draft Environmental Impact Statement

Dear Mr. Parsons:

The City of Port Huron acknowledges that there is a legitimate need to improve the existing bridge plaza infrastructure in order to reduce processing delays, enhance security and accommodate new technologies. However, we have several areas of concern related to Section 1 of the Draft Environmental Impact Statement (DEIS) and supporting technical reports. These concerns are as follows:

- Section 1 of the DEIS does not accurately define the existing and future plaza needs.
- Section 1 of the DEIS does not provide adequate justification to support the physical layout/size of the preferred alternative. As a result, there is not adequate justification provided for the Preferred Alternative's significant cost and negative impacts.

Purpose and Need

Specific details that support our concerns are presented below:

1. The DEIS and the supporting traffic technical report provide an overview regarding many relevant factors that will affect future traffic volumes crossing the Blue Water Bridge (BWB). These include regional and national population trends, trade agreements, economic conditions/forecast, SEMCOG's regional traffic model, historic trends, border plaza/security facilities, etc. However, it is not clear in these documents how this background information was used to decide upon the future growth rate that was applied to the existing traffic counts. We have been verbally informed by MDOT representatives at the 10/3/07 meeting with the Bridge Plaza Business and Community Coalition (Coalition) that the selected future growth rate was identified mainly based on an extension of historic long-term traffic trends. We are concerned that the written documents do not provide a definitive, clear and well-reasoned justification for selection of the traffic growth rate which was used to develop the design-year traffic projection. Without this justification, the future traffic projections in the DEIS do not adequately support the need for the project, nor do they substantiate the negative impacts caused by the preferred alternative.

2. As MDOT is no doubt aware, the total volume of traffic crossing the BWB has declined notably since the year 2000. However, the DEIS attempts to make the case that long-term (i.e., 20+ year) trends should be used to predict the future growth rate for bridge crossing volumes. We believe that this is a flawed assumption because it ignores the fact that long-term historic trends were very heavily influenced by major infrastructure improvements and landmark international trade agreements. It is not reasonable to believe that similar events will continue to occur during the next 20 years. Specifically, major milestones that affected historic trends include:

- Completion of highway 402 in Canada in 1982
- Completion of various sections of I-69 between Lansing and Port Huron between 1987 and 1991
- Completion of I-69 from the Indiana border to Ontario in October 1992
- Construction of the elevated Blue Water Bridge Plaza in the mid 1990s
- Implementation of NAFTA during the 1990s

These one-time improvements/trade agreements contributed very significantly to historic bridge crossing growth trends. However, looking to the future there does not exist anything comparable which would justify the growth rates that are used in the DEIS. If anything, the additional international crossing being studied in the Detroit area could draw traffic away from the BWB crossing.

A brief review of some recent MDOT traffic volume projections for the BWB demonstrates that our concerns are well founded because MDOT has consistently overestimated future traffic growth at this crossing. The first example is from the 1998 MDOT study that evaluated improvements to the plaza. We compared the actual truck volume counts for 2005 and 2006 against the forecasted crossing volumes from the 1998 study. This comparison showed that the 2005 truck forecast was high by 653,279 annual crossings, and the 2006 forecast was high by 1,003,325 trucks per year. This represents a daily overestimate of truck volumes by 1,789 for 2005 and 2,749 for 2006. Next, we compared the 2006 and 2007 forecasts presented in the BWB DEIS and traffic report against the actual crossing counts for these same periods. This comparison showed that for 2006, the actual truck counts are nearly 215,000 per year less than the high estimate forecast. Additionally, truck volumes from January 1, 2007 through July 31, 2007 show a 4.2% decrease compared to the 2006 actual counts. These examples lend credibility to our concerns because there is a demonstrated pattern of inaccuracy (i.e., always too high) with MDOT traffic projections at this location.

MDOT should revisit the traffic forecast and develop a revised forecast that is more reasonable and in line with the reality of what is actually happening here.

3. There does not appear to be any mention/discussion/analysis in the DEIS about the following topics and how they would affect BWB crossing volumes in the future:
- The proposed third crossing in the Detroit area
 - New passport requirements for travel between the US and Canada
 - Canadian trash trucks

Discussion regarding these topics should be added to the documentation so that it can be evaluated. Without this information, it is difficult to assess the validity of the needs presented in the DEIS.

4. The traffic technical report emphasizes the important role that population growth plays in predicting economic activity and crossing volume growth (page 2-8). The Midwestern region makes up 60%+ of the total trade value crossing the bridge. This region is expecting only 9.5% population growth over the 20-year forecast period. Yet total traffic volumes crossing the bridge are projected to go up by about 50% over this same time period. We understand that there may not be a direct correlation between population growth and bridge crossing volumes, but these statistics are so divergent that they appear inconsistent. When considered in conjunction with the comments noted above, this apparent inconsistency supports our concern about the reasonableness of the future traffic forecast. We believe that the traffic forecast should be revisited to examine this issue.
5. Section 1 of the DEIS does not provide anywhere near adequate detail/analysis regarding existing and future vehicle delays/queues at the plaza (not the surrounding intersections, but the actual plaza/primary inspection booths). When we have verbally inquired about this issue previously, we have been told by MDOT staff that these calculations cannot be released due to security concerns on the part of US Customs and Border Protection (CBP). Without this detailed analysis of the existing and future baseline, the need for the project is not adequately documented in the sense that it is impossible to evaluate how well potential solutions (i.e. alternatives) address these problems. Related to this, the DEIS does not provide any benchmark or goal for the desired acceptable delays after plaza improvements are made. This is a very serious deficiency with the DEIS. We are, quite frankly, surprised and frustrated that after more than five years of studies and many millions of tax dollars expended, the DEIS is missing such crucial and fundamental information.

We have reviewed the DEIS for expansion of the Peace Bridge border crossing plaza located in the Buffalo/Niagara area of New York (<http://www.peacebridgex.com/deis.aspx>). This DEIS was prepared by the Peace Bridge Authority in cooperation with Federal Highway Administration (FHWA) and CBP, and the public comment period for the document just ended in October 2007. In virtually all relevant respects, the Peace Bridge border crossing and plaza study is indistinguishable from the BWB crossing. The consultant team that prepared the Peace Bridge DEIS included as the traffic consultant Wilbur Smith Associates, the same firm that MDOT has hired to prepare the BWB DEIS. The Peace Bridge document includes a very extensive analysis (dozens of pages with tables and figures) that presents bridge plaza delay times and queue lengths for existing conditions, future no build conditions and future conditions for the alternatives they are considering. The document also includes CBP's stated goals for future vehicle delay times at the plaza. It is absolutely unacceptable for FHWA and CBP to refuse to provide this information in the BWB DEIS while simultaneously providing extensive details in the Peace Bridge DEIS. Clearly, the claim that security concerns require the withholding of this information is false, or the information would not have been included in the Peace Bridge DEIS. We are very disappointed that the citizens of Port Huron and Michigan have not received equal consideration and treatment compared to residents of Buffalo/Niagara, New York.

November 26, 2007

The claim that border crossing delays cannot be provided is further undermined by the fact that CBP actually maintains a website (<http://apps.cbp.gov/bwt/>) that has real time border delays listed. If CBP is providing real time delays on a website, it is not logical that existing and future theoretical delays cannot be included and analyzed in the DEIS.

6. Section 1 of the DEIS provides general information and broad statements about the need to enhance security and accommodate new security-related technologies. While we support these goals in concept, they do not by themselves provide adequate justification for a plaza size of 65 acres. The DEIS includes little if any specific information about how the projected traffic volumes relate to the required size and layout of the proposed plaza components. Without having more detailed information, it simply is not possible to assess whether any of the alternatives meet a legitimate need or not. We are requesting that section 1 be revised to include very specific information about the size/layout needs for each major component of the plaza.
7. As MDOT is aware, the Bay Mills Indian Community has proposed a casino development near the Blue Water Bridge plaza. If this development is constructed, it has been estimated that approximately 18,000 vehicles per day will visit the casino. These vehicles will come from both Canada and the U.S. For the DEIS traffic analysis, what assumptions were made regarding the effect of this development on traffic volumes/operations both crossing the BWB and on the local street network? We are concerned that the DEIS may not take into account this development, especially with regard to new local road infrastructure surrounding the plaza.

Based on these concerns, we do not believe that MDOT, FHWA, and CBP have met the required threshold for justification of the preferred alternative, nor do we believe that section 1 of the DEIS satisfies the requirements of the National Environmental Policy Act (NEPA) and its implementing regulations. We believe that section 1 of the DEIS needs to be substantially supplemented in order to provide full public disclosure, meet regulatory requirements, and justify the very extensive impacts caused by the preferred alternative. We believe that the deficiencies are substantial enough that MDOT, FHWA, and CBP should prepare a Supplemental DEIS to address the concerns (i.e., they cannot be handled solely in the Final EIS).

Alternatives

Similar to the comments provided above regarding the purpose and need, we do generally acknowledge that many of the infrastructure components which are included in the three build alternatives which were studied in detail in the DEIS are necessary. Nevertheless, section 2 of the DEIS is substantially deficient in several areas with regard to the specific components and characteristics of the three build alternatives.

8. As noted above, the DEIS does not include any specific information which evaluates border plaza delays and queues for the alternatives. Without this information, it is impossible to compare the options against each other to determine which option is preferable. It is also not possible to compare the likely benefits of the three build alternatives against the no build alternative to assess whether the purported reduction in delays justifies the negative impacts and costs of the build alternatives. Further, it is not possible to determine whether any of the options are meeting the project purposes if this information is not provided. The Peace Bridge DEIS provides a very detailed analysis of border plaza delays and queues for the alternatives which were considered for that project. Again, it is absolutely unacceptable that this information is withheld from the BWB DEIS when CBP and FHWA have provided the exact same information

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at another almost identical border crossing. Furthermore, it is not acceptable that this information is provided at a later date for the preferred alternative only – it needs to be available at the DEIS stage so that good decisions can be made while selecting the preferred alternative. And finally, it is just simply disturbing and appalling that after more than five years of study at a cost of more than \$10 million in tax money, that such fundamentally important and readily available information has not been provided. It borders on absurd that almost half a billion dollars will be expended (resulting in massive disruption to the community) without a hard look at the benefits that are expected to result.

9. The DEIS does not evaluate a reasonable and representative range of alternatives with regard to different numbers of inspection booths and different levels of CBP staffing at the inspection booths. Instead, it appears that the number of inspection booths is the same for all three of the build alternatives. CBP staffing is not addressed for any of the alternatives. Both of these factors will have a considerable effect on delay times and queues, as well as the total acreage needed/size of the facility. Section 2 of the DEIS does not meet relevant NEPA requirements because both of these variables have a large impact on how well an alternative meets the project purposes/how much it costs/negative impacts it causes, yet there is no variability evaluated (i.e., a representative range of options is not compared). The Peace Bridge DEIS included information related to different numbers of inspection booths and included sensitivity analysis about how this affected delays and queues at the border plaza. If the information can be provided for the Peace Bridge, the same analysis should be done here. Without this information, full public disclosure has not occurred, and viable options may be excluded.
10. We note that there is a letter in the correspondence appendix from Kirk Steudle dated June 30, 2006 which states on page 7 that CBP has been unwilling to provide any staffing commitments for the alternatives. Section 2 of the DEIS does not provide any information about CBP staffing levels for the alternatives. Without staffing commitments, it is not possible to perform an accurate analysis of how well an alternative meets the project purposes/needs. As a result, the DEIS is deficient because it does not provide full disclosure, does not evaluate a representative range of alternatives, and does not provide adequate analysis to support selection of a preferred alternative. This same letter from Mr. Steudle indicates a general lack of cooperation and responsiveness from CBP. CBP's lack of cooperation does not in any way relieve FHWA, CBP, and MDOT of their responsibilities to comply with all applicable statutes and regulations regarding preparation of this DEIS. MDOT needs to be more firm with CBP so that all agencies involved can meet the relevant regulations and laws. If CBP refuses to provide all needed information, MDOT should stop the study until it is made available.
11. The information provided in the DEIS does not adequately explain the need for a border plaza size of 65 acres. There is general reference made to modeling conducted using the BorderWizard software, but there is not enough specific information provided for members of the public to determine how this analysis was performed and if it is in fact accurate. The DEIS references the document entitled *U.S. Land Port of Entry Design Guide and Program Requirements* as the basis for the layout and sizing of the facilities at the plaza. We have requested through our consultants that a copy of this document be provided so that we can assess the layout and size of the plaza. To date, this document has not been provided. We are very concerned that the preferred alternative is considerably larger than what is actually needed to process traffic, accommodate future technologies, and ensure security. Representatives from the City of Port Huron have

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repeatedly asked for specific information to justify the 65 acres size, but this information has not been provided. They have also asked for information about other comparable border crossing plazas where similar facilities have been planned/constructed, but this information has not been provided by MDOT. We are also concerned that the plaza (City East and City West Alternatives) may not be laid out in the most efficient possible manner. As much as we would like to simply trust MDOT to get it right, the history at this location (i.e., we have caused by processing trucks on the left hand side of the bridge) leads us to be concerned about any layout prepared by the government agencies with authority at the plaza. Without the detailed information noted above and timely access to the *U.S. Land Port of Entry Design Guide and Program Requirements*, we are not able to perform a meaningful evaluation of the size and efficiency of the alternatives in the DEIS.

12. We have received written (email) confirmation from the Peace Bridge consultant team project manager that the Peace Bridge U.S. plaza alternative is 39 acres in size. This is what they called Alternative 1B-R3 ("Maximize Use of Existing U.S. Plaza") which is the same concept as the City East and City West alternatives in the BWB DEIS (Alt 1B-R3 is the only option in the Peace Bridge DEIS that has a plaza in the U.S.). The Peace Bridge DEIS looked at four build alternatives in detail, and the other three are all "reverse inspection" alternatives which are unlikely to be selected due to the failed US-Canadian negotiations on this topic. The size of this Peace Bridge plaza is inconsistent with the plaza size for the BWB project, and we believe that the BWB plaza could be reduced in size to something similar to what is planned at the Peace Bridge.

We have compared the average daily crossing volumes for the two border crossings to see if possibly the difference in size might be due to different traffic volumes which require different facilities. Here are those volumes (rounded):

Peace Bridge 2006: 15,300 passenger cars, 3,600 commercial, 18,900 total
BWB 2005: 10,200 passenger cars, 4,900 commercial, 15,100 total
Peace Bridge 2030: 18,400 passenger cars, 6,900 commercial, 25,300 total
BWB 2030: 12,300 passenger cars, 10,000 commercial, 22,300 total

These traffic volumes do not provide the basis for the plaza size difference between the two locations. It is unacceptable for the citizens of Port Huron and Michigan to be treated differently than citizens of Buffalo/Niagara and New York. Based on this situation, we believe that MDOT, FHWA, and CBP have not considered a reasonable and representative range of options in the DEIS as required under NEPA. There should be a new alternative which is approximately 40 acres in size seriously evaluated in a Supplemental DEIS – if it can work for the Peace Bridge, it most certainly should be evaluated in detail at the Blue Water Bridge.

13. The Peace Bridge DEIS included detailed analysis of "reverse inspection" alternatives, though they clearly note that these cannot be selected as the final option in the Record of Decision (ROD) unless some type of agreement is reached between the U.S. and Canada. Recognizing that there will be a new Administration in Washington DC in about 14 months, they are keeping their options open which is prudent considering that it will be several years before construction begins on this project. We believe that MDOT has prematurely eliminated in the reverse inspection alternative from the BWB study and that the DEIS should have analyzed this

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alternative in detail. Specifically, MDOT eliminated this option from the BWB study in 2003, three to four years before DHS Secretary Chertoff sent an official letter to the Canadians notifying them that the negotiations on this topic had failed (that letter is dated April 26, 2007). We are concerned that MDOT eliminated this alternative for the BWB project while negotiations with the Canadians were apparently still underway. Once again, we believe that the DEIS does not discuss in detail a representative range of alternatives because this option has been eliminated.

14. The proposed traffic control/maintenance of traffic plan, construction stage 2, would detour Pine Grove traffic to 10th Avenue and would remove Pine Grove between Hancock and 10th Avenue. This will result in a tremendous increase of traffic at the 10th Avenue and Pine Grove intersection. How will MDOT address traffic control problems at the 10th and Hancock intersection? We are very concerned that this plan will result in very long delays and possibly gridlock on the local street network.

In stage 3 of the proposed traffic control plan the DEIS states that in-bound plaza traffic from Canada will use the newly constructed inspection lanes during this stage. "A temporary gate will be constructed on Hancock for cleared plaza traffic while the permanent exit ramps are constructed." How will the in-bound Canadian traffic be routed onto I94/I69 westbound once they exit the plaza through the temporary gate on Hancock? We are extremely concerned that this plan will result in very long delays and possibly total gridlock on the local street network.

Considering these points, we believe that the DEIS does not provide nearly enough detail regarding the proposed traffic control/maintenance of traffic plan, its costs, and the negative impacts which will result during construction. We also believe that the plan (as proposed conceptually) may not actually work due to conflicts with the local street network which have not been analyzed. We request that these items be addressed and the information be added to the DEIS.

We believe that the above-noted deficiencies are substantial enough that MDOT, FHWA, and CBP should prepare a Supplemental DEIS to address the concerns (i.e., they cannot be handled solely in the Final EIS).

Existing Conditions and Impacts

Our comments regarding section 3 of the DEIS are provided below.

15. The DEIS states that the preferred alternative will discharge storm water into the city's existing system at the same rates as existing. What specific analysis has been done to show that this is technically feasible and that flow rates will not increase? The DEIS needs to provide more detailed information regarding analysis of the storm water system design including specific information about the design/sizing of detention/retention systems and how they will release storm water.
16. MDOT has not requested (nor have they received) permission from the City of Port Huron to release new storm water discharges into the City's storm sewer system. The DEIS fails to note this important approval which is required.

17. The storm water generated from the existing plaza is currently being served by two MDOT owned storm outfalls. These outfalls are 42-inch and 48-inch in diameter and discharge to the Black River just south of the I-94/I-69 Bridge over the Black River. The tributary area of these outfalls include the elevated plaza, the parking lot east of 10th Avenue between Harker and Elmwood, the parking lot north of the elevated plaza west of Pine Grove, the parking lot north of the elevated plaza west of the DTE substation, the I-94/I-69 right-of-way from Hancock Street to the Black River and Pine Grove Avenue (M-25) from south of Whipple to north of Sanborn. A portion of the system east of Pine Grove Avenue on the elevated plaza has the capability to direct storm flow to a holding tank (approximately 30,000 gallons) for the capture of contaminants in the event of a tanker spill during a rain event. It should be noted that the above-mentioned MDOT 42-inch and 48-inch storm outfalls are not discussed in the DEIS. The DEIS states that the area in the vicinity of the existing plaza drains into the City of Port Huron's combined sanitary/storm sewer system. The statement is mostly incorrect as discussed above.
18. The storm water generated in the area bounded by Hancock/Elevated Plaza/Pine Grove and I-94/I-69 is currently being served by the City of Port Huron's 72-inch combined sanitary/storm sewer which bisects the existing plaza west of Pine Grove. The combined sewer has previously been separated both upstream and downstream of this location and will become a storm sewer when separation is complete. The only remaining properties discharging sanitary flow to the sewer are the Holiday Inn Express, Can Am Duty Free, McDonald's, Port Huron Lanes, BP Gas Station, Wendy's and the existing plaza. The DEIS does not discuss how MDOT is proposing to assure that the quality and quantity of storm water discharge to the City's system will comply with the City's Storm water National Pollutant Discharge Elimination System Permit. This must be demonstrated before the City will consider the possibility of new discharge locations.
19. The City is under a federal mandate to complete the Combined Sewer Overflow (CSO) project needed in the area. The City has not proceeded with separation of this area because of the uncertainty of the plaza project. The City is mandated to complete the CSO project by, December 31, 2016. How does MDOT intend to assure that the City is not in non-compliance with its wastewater NPDES permit?
20. The preferred alternative is inconsistent with the city's land-use plan and zoning plan. This is yet another reason why MDOT needs to work very hard with FHWA and CBP to reduce the size of the new plaza's footprint to approximately 40 acres like the proposed new Peace Bridge plaza.
21. If we understand the information correctly in the DEIS, previous right-of-way acquisitions that have already been completed are not included in the total calculations for a number of relocations, economic impacts, or tax base impacts. If this is true, the DEIS is not portraying an accurate picture of the true impacts of the alternatives. If this is true, the DEIS needs to be revised to provide a full disclosure of all impacts including those which are previous purchases.
22. The neighborhoods that will not be directly impacted (i.e., homes are not going to be purchased and demolished) by the preferred alternative will suffer cumulative impacts which are not fully disclosed in the DEIS. This area will be viewed as the new "buffer zone" and could realize a loss in perceived desirability and value. Per MDOT policy, there will be no compensation or additional amenities provided through the project that would alleviate this perception. The DEIS

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should identify cumulative impacts to the homes that will become the new "front row" to the plaza. These impacts include the potential for loss of value, increased noise, and visual impacts.

23. The BWB DEIS reports (Table 3.4.2) that the City would lose approximately 1.4 percent of its existing tax base if the Preferred Alternative is built. The DEIS goes on to note that the permanent loss of the City's revenue would also affect budgets and other programs. While we agree that it is somewhat difficult to calculate the potential loss of revenue, we do not agree with the 1.4 percent loss estimate reported in the DEIS.

After preparing a schedule of all the properties believed to be acquired, based on the MDOT maps, the City's tax base would experience decreases in the 2% range. As a result, the City of Port Huron property tax revenues will decline by approximately \$250,000 per year. These impacts would also result in an annual income tax revenue loss of about \$125,000 per year. Because revenue sharing is population based, it will eventually (after the next census) decline and that could be by as much as \$80,000 per year. A decline in utility revenues should also be anticipated. If water and sewer revenues decrease by 2% per year, the decline would be over \$200,000 annually. The DEIS should be revised to accurately reflect these losses.

The magnitude of these potential losses, especially during hard economic times in the state of Michigan, further underscores the need for MDOT to work with CBP and FHWA to reduce the size of the plaza footprint.

24. The City East and City West Alternatives would place upon the City of Port Huron a greater demand for emergency, police, and public works services presently not within the City's budget. In the post 9/11 era, small communities such as Port Huron have been asked to shoulder a greater degree of costs in keeping our nation safe and secure. The DEIS does not adequately address how these additional emergency services will be financed or what financial impacts they may have on the City. More detail is needed for full disclosure.
25. The construction impacts section of the DEIS does not fully recognize the magnitude of the impacts which will occur during construction. We believe that the local street network could become regularly gridlocked due to the proposed maintenance of traffic plan. This will have a devastating effect on businesses in the area and will greatly inconvenience the traveling public for several years. The DEIS needs to be revised to fully disclose this information.
26. From information available to us, we could not determine if the noise analysis incorporated the expanded plaza as a noise source. The idling of trucks and vehicles and the accelerating of these vehicles would result in additional noise if it is not included in the noise analysis. If the analysis did not include this information, the DEIS needs to be revised based on additional analysis which includes this noise source.
27. The residences along Riverside and Hancock Street and 10th Avenue were not included in the noise study as noise receptors. These residences should be included as they will experience more traffic and/or will be the new front row to the expanded plaza. The results of this additional analysis needs to be included in the DEIS.

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28. Noise receptor locations 73, 75, 106, 107, 172, and 174 will experience greater traffic volumes, roadways will be shifted closer to the residences, and/or they will be closer to the plaza, yet the future noise levels are predicted to decrease. Please explain how the noise model is predicting lower noise levels? If this is a mistake in the modeling, please provide revised analysis in the DEIS.
29. Noise receptor location 152 (apartments) is proposed to be purchased as part of the Preferred Alternative. The City's future land use plan calls for the property to be used for Parks and Recreation. What are the future predicted noise levels at this location and will this land use be compatible with future noise levels?
30. Sound waves will echo off of the large security and retaining walls that are part of the preferred alternative. We were not able to determine whether this phenomenon is reflected in the noise study which was conducted. If this was not factored into the TNM analysis, MDOT should update the analysis and the results presented in the DEIS.
31. The DEIS does not provide adequate disclosure of potential microscale air quality impacts caused by the alternatives. Specifically, the CO hotspot analysis was only conducted at the future Hancock Street and M-25 Connector intersection. Clearly, the primary inspection booths at the expanded Bridge Plaza will have the largest concentration of idling vehicles. The combined idling vehicle hours on the plaza will no doubt far exceed what would occur at the Hancock/M-25 intersection. Yet, no CO hotspot analysis was conducted for the Bridge Plaza. The DEIS needs to provide analysis results for potential CO levels at receivers near the Bridge Plaza.

The DEIS notes that PM_{2.5} is a serious health concern due to fine particles reaching the deepest regions of the lungs. It also notes that PM_{2.5} has serious health effects that include asthma, difficult/painful breathing, chronic bronchitis, and PM_{2.5} associated with diesel exhaust is also thought to cause lung cancer. The DEIS goes on to state the "diesel exhaust is a particular concern." Yet, the DEIS does not analyze the potential impacts of PM_{2.5} or PM₁₀ for any of the alternatives, nor does it provide a comparison of each alternative. With the potential for large numbers of idling diesel trucks on the plaza, it is important that the possible impacts of particulate matter are disclosed. While it may be true that there is no commonly accepted method for modeling PM_{2.5}, we believe that a project of this magnitude warrants development of a specialized methodology or, at a minimum, a qualitative comparison of the options. This further supports the need to fully disclose projected queues and delays at the border plaza as noted previously in our comments.

Once again, the Peace Bridge DEIS has done a much more thorough job than the BWB DEIS of documenting microscale air quality impacts. Their document appears to have included CO analysis for the Bridge Plaza, and they have included a very detailed analysis/results for PM_{2.5}. If this information can be provided by FHWA and CBP in the Peace Bridge DEIS, it should also be disclosed in the BWB DEIS.

32. The DEIS notes that the new proposed bridge over the Black River will increase the existing opening under the bridge, a fact that will help to offset any proposed fill in the 100 year floodplain. By allowing improved flow under the bridge, this would "ensure that no upstream flood elevations are affected". We have two concerns related to the floodplain crossing at this

location. First, there is no analysis/information presented regarding potential floodplain impacts downstream from the crossing. If, as is claimed in the DEIS, a larger bridge opening conveys the floodwater more efficiently, the potential for flooding impacts downstream from the bridge may have been increased. This needs to be analyzed with the results disclosed in the DEIS. And secondly, relevant regulations require that potential projects such as this result in no harmful interference with floodwater elevations/conveyance. The DEIS does not provide enough details to confirm whether or not this threshold has been met. We are concerned that harmful interference with flood elevations may occur downstream from the bridge for the reasons noted above. The DEIS should be revised to address these issues.

33. While the DEIS does provide descriptive information about likely social and economic impacts, we believe that that the document does not adequately convey the severity of impacts when all of these individual factors are considered together. The cumulative impact assessment is lacking in this regard and needs to be substantially enhanced.

Mitigation

Our opinion is that the mitigation considerations and commitments included in the DEIS are not sufficient to address the social and economic impacts caused by the alternatives, especially the preferred alternative.

Our primary concern is that MDOT has not seriously considered creative mitigation opportunities which are ineligible for traditional funding sources. Specifically, the emphasis to date has been primarily on whether or not mitigation measures are eligible for Act 51 funding. We think that MDOT, FHWA, and CBP are not giving adequate consideration to the intent of mitigation under NEPA and its implementing regulations. As background, we wanted to include the following excerpts from NEPA and implementing regulations with our emphasis added in **bold**:

The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. (40 CFR § 1500.1(b): Purpose)

Federal agencies shall to the fullest extent possible: Use all practicable means consistent with the requirements of the Act and other essential considerations of nation policy, to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions on the quality of the human environment. (40 CFR 1500.2(f))

The CEQ regulations define mitigation as:

- *Avoiding the impact altogether by not taking a certain action or parts of an action.*
- *Minimizing impacts by limiting the degree or magnitude of the action and its implementation.*
- *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.*

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- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.*
- *Compensating for the impact by replacing or providing substitute resources or environments. (40 CFR 1508.20)*

FHWA's mitigation policy states:

Measures necessary to mitigate adverse impacts will be incorporated into the action and are eligible for Federal funding when the Administration determines that:

- 1. The impacts for which the mitigation is proposed actually result from the Administration action; and*
- 2. The proposed mitigation represents a reasonable public expenditure after considering the impacts of the action and the benefits of the proposed mitigation measures. In making this determination, the Administration will consider, among other factors, the extent to which the proposed measures would assist in complying with a Federal statute, Executive Order, or Administration regulation or policy. (23 CFR 771.105(d))*

It is a fact that this type of project is unprecedented in Michigan, and the severe impacts it will generate are likewise unprecedented in recent times, especially for a community the size of Port Huron. Considering this context, we believe that an unprecedented mitigation effort is likewise appropriate. We believe that such mitigation is consistent with the intent of NEPA and its implementing regulations which do not limit mitigation requirements to only those sources which are traditionally used for other projects. We further believe that non-standard mitigation is both practicable and reasonable considering the context of this project. We would like MDOT to partner with the city of Port Huron and the Coalition to work with FHWA and CBP in order to seriously address this issue. We believe that this is a reasonable request because the city of Port Huron and is being asked to bear a disproportionately high burden of the negative affects for a project which will benefit literally millions of citizens from across the United States and Canada.

We have the following specific comments regarding mitigation:

34. As a result of the Preferred Alternative, 137 households and 37 businesses will be relocated. The homes that will be lost are well-maintained, affordable, owner-occupied dwellings. High quality, affordable housing in a traditional neighborhood setting is difficult to find in St. Clair County. This neighborhood and the established neighborhood surrounding it are difficult to replace or duplicate within the City limits. Additionally, the DEIS accurately notes the project area is completely built out. The DEIS and Conceptual Stage Relocation Plan state that similar replacement housing is available and that comparable replacement properties are available for the businesses which would be purchased. We do not believe that enough detail has been provided in the DEIS regarding potential replacement housing or business locations. We would like to see a very specific analysis of where the replacement residential properties are located, whether these replacement properties are in a similar neighborhood setting, How the price ranges of displaced homes match up against available housing, school systems where located, etc. If these details indicate that the replacement residential housing is different than the current situation, such

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differences should be noted as impacts in the DEIS. For the 37 businesses which will be displaced, we have similar concerns. We believe that the DEIS notably understates the difficulty that these businesses will experience in order to become reestablished. Specifically, the DEIS needs to have more information regarding exactly where the potential replacement properties are located, whether potential replacement properties offer similar exposure to potential customers (i.e., where is the replacement property located relative to potential customers and major roadways), and other market/site specific variables that affect the viability and profitability of the business. Additionally, the DEIS lumps all of the businesses into the same generic category when it assesses potential replacement opportunities. This is not appropriate, and the DEIS needs to have a specific evaluation of possible replacement properties for each type of business since the needs are very different among the various types of businesses. Performing this type of analysis will likely show that comparable replacement properties are not available for some of the businesses.

35. The DEIS does not provide any information about how the city of Port Huron will be compensated for the public rights of way that are taken for this project? It is our belief that the city is entitled to compensation for this property. This information should be added to the DEIS.
36. More information needs to be provided in the DEIS regarding how public and private utilities will be relocated. The City of Port Huron requires that its publicly owned utilities are located within a public right-of-way or an access easement to assure continual access (i.e., 24 hours per day, seven days per week). This means that MDOT will have to either: 1) relocate public utilities, or 2) provide unfettered access to the City. Additional details are needed in the DEIS to address this issue.
37. We would like to see a commitment in the DEIS that if there is eventually "excess" land created once the preferred alternative is constructed, MDOT will gift such properties to the City for redevelopment.
38. We are unclear as to how the alternatives will replace and enhance pedestrian access along the North/South corridors and the East/West (to the St. Clair River waterfront) corridors. We are requesting that the DEIS be revised to provide details about these facilities. We would also like to see these non-motorized connections enhanced as part of the mitigation package.
39. The final environmental impact statement needs to include specific commitments with regard to context sensitive solutions (e.g., landscaping, wall treatments, non-motorized facilities, etc.) that are agreed upon with the coalition and the city of Port Huron. We anticipate that this will require a significant coordination effort.
40. In our previous comments above, we have noted that the analysis of project needs and how well the various alternatives address the needs is deficient because it does not look at various CBP staffing levels. Many other conclusions about social/economic/environmental benefits and impacts depend directly on assumptions about CBP staffing levels. For example, the economic benefits which are anticipated will not be realized if delays are longer due to lower CBP staffing levels. In order to assure that the DEIS analysis is in fact accurate, it is critical that minimum CBP staffing levels are guaranteed. We believe that CBP needs to provide a guarantee of minimum staffing levels relative to delay times at the bridge plaza. Without this mitigation

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commitment, much of the analysis in the DEIS is mere speculation. Further, the negative impacts of the preferred alternative may not be justified if staffing levels are too low to assure limited delay times.

41. MDOT representatives have made broad and general statements that that the agency will work with the local communities and citizens in order to help identify possible resources which are outside the jurisdiction of MDOT. Examples cited include possible economic development grants or similar programs. While this general concept is admirable, no details regarding this potential partnership have been provided in the DEIS. We would like MDOT to provide a solid commitment which includes staffing and budget resources to help develop and implement this plan over the long term. We believe that the necessary commitment from MDOT will need to be far greater than what has been discussed or envisioned to date. The commitment from MDOT regarding this topic should be commensurate with the massive impacts which will result from the preferred alternative. As a first step in this process, we would like to have specific meetings where this plan can be developed. We are requesting that the MDOT representatives who come to this meeting have the authority to commit the agency to the mitigation measures which are being discussed. We believe that FHWA and CBP representatives also need to participate in this process. It is our opinion that MDOT may need to hire a professional facilitator in order to come up with a solution that is acceptable to all parties.
 42. Related to the preceding comment, we believe that the present situation represents a tremendous opportunity for MDOT and the city of Port Huron to join forces and capitalize on the strengths of the area surrounding the border Plaza. However, we sincerely believe that the potential for this area will not be realized unless both parties are willing to go beyond standard solutions and ways of thinking. We would like MDOT to commit to participate in and identify/secure funding for a visionary world-class economic development consultant to develop a plan for the area surrounding the border plaza. We believe that this type of mitigation is very appropriate considering the scale and types of impacts caused by the preferred alternative. Although this type of mitigation is not eligible for Act 51 funds, MDOT is definitely capable of partnering with the citizens of Port Huron to find a creative way to accomplish this task.
 43. There are examples from around the country where FHWA has facilitated unique and creative mitigation for large-scale projects with massive impacts. This has included non-transportation funding sources. Some of the most notable case studies are identified and described on the website listed below. Here in Michigan, the I-696 project in Oak Park included funding from other federal sources. Also, in Seattle, FHWA has provided unique mitigation as well. This demonstrates that there is precedent within FHWA for providing creative and unique mitigation. http://www.ciatrans.net/Community_Impact_Mitigation/CIM_Introduction.html
- Other**
44. The DEIS does not fully disclose the costs which the city of Port Huron budget/infrastructure will have to bear as a result of the proposed plaza alternatives. This includes providing emergency services and utilities. Taking this into consideration along with the other massive impacts which will be suffered by the community, we believe that it is reasonable that the bridge crossing tolls should be increased by a relatively small amount, and this revenue would be directed to the city of Port Huron.

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45. The DEIS (page 1-24) says that construction of the preferred alternative is included in the regional transportation plan (RTP) for the years 2006-2010. We have looked at the RTP, and we note that the project is scheduled in the timeslot of 2011-2015. We also note that more than \$150 million in funding of the total \$390 million construction cost is coded as "private" on the detailed report for this RTP project. What private funding source has been assumed to cover this large portion of the funding? Also, we are concerned that the massive costs of maintenance of traffic during construction may not be fully accounted for in the cost estimate.
46. We note that there was a Federal Register notice published on November 7, 2006 which indicated that the Black River bridge portion of the project would be evaluated in a separate NEPA document. However, we are unaware of a subsequent notice being published to join the two projects back into the same NEPA document. If there was not a subsequent notice informing members of the public that the two projects have been joined back together, we are concerned that MDOT did not follow customary procedures in this regard.
47. We do not believe that it is reasonable for the Black River bridge portion of the project to be joined together with the bridge plaza portion. Specifically, the Black River bridge portion of the project does not need to be bogged down while the controversial bridge plaza issues are debated. We believe that the Black River bridge portion of the project does have independent utility and logical termini which would allow it to receive separate environmental clearance. We are requesting that the Black River portion of the project be separated as was previously planned and advanced separately.
48. We are requesting that the DEIS be revised to specifically state that the City of Port Huron will not be requested or required participate in any of the costs of the project.

Sincerely,

Karl S. Tomion
City Manager



CHARTER TOWNSHIP OF PORT HURON

3800 Lapeer Road
Port Huron Twp., Michigan 48060

Phone: (810) 987-6600
Fax: (810) 987-6712

December 4, 2007

Mr. Bob Parsons
Public Hearing Officer MDOT
PO Box 30050
Lansing, MI 48909

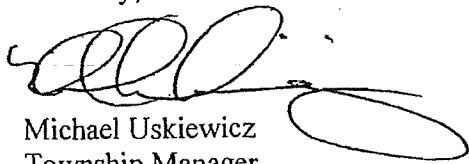


Dear Mr. Parsons,

The attached resolution was offered to the Port Huron Township Board at its meeting of December 3, 2007. The board by unanimous decision approved the resolution as a means of providing their position on the Draft Environmental Impact Statement.

If you have any questions on this matter please feel free to give me a call. Thank you for your attention in this matter.

Sincerely,


Michael Uskiewicz
Township Manager

Resolution
December 3, 2007

Trustee Reilly with support from Trustee Colby offered and moved the adoption of the following resolution:

WHEREAS, the Blue Water Bridge crossing between the U.S. and Canada is a vital link which enhances the economic prosperity of both countries; and

WHEREAS, existing traffic delays at the primary inspection booths coming into the U.S. are at unacceptable levels and considering security improvements at the plaza is a reasonable objective; and

WHEREAS, the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA) have published a Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study which is dated August 10, 2007, with public comment being accepted from August 10 through December 10, 2007; and

WHEREAS, the DEIS must comply with relevant sections of the National Environmental Policy Act (NEPA) and its implementing regulations, as well as several other state and federal environmental laws; and

WHEREAS, since 2002, MDOT, FHWA, U.S. Customs and Border Protection (CBP) and U.S. General Services Administration (GSA) have studied various bridge plaza improvement options along with potential improvements to the I-69/I-94 corridor, including the bridge over the Black River; and

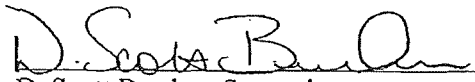
WHEREAS, all three of the practical alternatives studied in detail in the DEIS (including the preferred alternative) would inflict massive negative impacts on the City of Port Huron, surrounding townships, as well as St. Clair County;

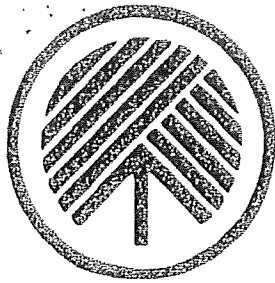
NOW, THEREFORE, BE IT RESOLVED that:

1. The DEIS fails to meet the requirements of NEPA and its implementing regulations. The DEIS is deficient because it fails to provide full public disclosure of impacts, does not adequately justify the project's costs/negative impacts, does not evaluate a reasonable range of alternatives, and does not provide adequate mitigation for the massive negative impacts which are anticipated.
2. Improvements to the I-69/I-94 corridor (including repairs to the Black River Bridge) should be evaluated in separate environmental document as previously planned by MDOT. It is not acceptable to delay improvements to this corridor while issues related to the bridge plaza are studied and debated.
3. The proposed 65-acre size of the plaza facility is not justified based on the information presented in the DEIS. Another alternative with reduced size needs to be evaluated in detail and compared to the three practical alternatives presented in the DEIS.
4. We are unequivocally opposed to advancement of the Preferred Alternative until all of our comments regarding its justification, other reasonable alternatives, and mitigation measures are fully addressed to our satisfaction.

5. A supplemental DEIS is needed to address the shortcomings of the present DEIS and to assure that there is full disclosure/adequate opportunity for public comment at this stage in the process. It is not acceptable for our concerns to be addressed only in the Final Environmental Impact Statement.

This Resolution is hereby declared adopted this 3rd day of December, 2007.


D. Scott Beedon, Supervisor



Charter Township of
Fort Gratiot

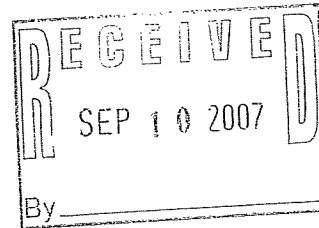
JAMES E. BUCKLEY
Supervisor

ROBERT C. CRAWFORD
Clerk

JUDITH A. REYNOLDS
Treasurer

September 6, 2007

State of Michigan Dept. of Transportation
Paul McAllister, Supervisor
Project Coordination Unit
Murray D. Van Wagoner Bldg.
P.O. Box 30050
Lansing, Michigan 48909



Re: Proposed Blue Water Bridge Plaza Welcome Center,
St. Clair County, Michigan

Dear Mr. McAllister:

I am writing to reiterate my concern regarding the proposed location of the Blue Water Bridge Plaza Welcome Center. The way the project is currently structured, traffic exiting the Welcome Center would have no other option but to exit in the westbound direction, and would have to travel approximately 12-14 miles to return to the Blue Water Area. Given the fact that Fort Gratiot Township houses the largest commercial corridor in St. Clair County, this would undoubtedly have a major negative impact and repercussions for not only Fort Gratiot Township, but the City of Port Huron and St. Clair County as well.

After reviewing the plan submitted by MDOT at the March 2007 Blue Water Bridge Plaza/Blue Water Area workshop, and listening to the concerns of local area businesses, I arranged to meet with MDOT officials to discuss possibility of changing the location of the Welcome Center. I met with Matt Webb from MDOT in July, 2007, who advised me that placing the Welcome Center in the center of the median was not an option.

Given the condition of The State of Michigan's economy, it is simply ridiculous to risk turning away commercial traffic. I hold myself personally accountable to not only Fort Gratiot Township, but St. Clair County as a whole, to do all that is within my power to correct what I see as an enormous error, and lack of concern over a potentially devastating project. We need to ensure that traffic traversing both to and from the Welcome Center has the opportunity to return easily to the Port Huron area. It is absolutely *imperative* that travelers from both directions have the ability to stop at the Welcome Center, have an opportunity to see what the Blue Water Area has to offer, and then have the capability to turn around and potentially bring in monies that will certainly have a trickle down effect from local area businesses to the Federal Government.

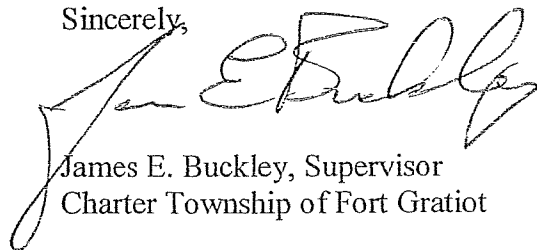
The Federal and State Government has no rules, regulations, or ordinances prohibiting the Welcome Center from being placed in the center of the median, even though I have been told this at several Blue Water Bridge Plaza meetings. I sincerely feel that if MDOT continues the Welcome Center project with the current location, we are in danger of seriously jeopardizing our area's economic base, something none of us can afford to do right now.

I have reviewed the aerial photos and Welcome Center designs, and believe that the facility can easily be placed in the median with the adjustment of westbound I-94/I-69 into property already owned by MDOT. While any form of vehicular travel has its risks, it would actually be safer to allow travellers the opportunity to stop at the Welcome Center prior to entering the Blue Water Bridge Plaza in order to review maps, prepare necessary paperwork, and use the facilities, as opposed to maneuvering through directions, and reading road maps and signs while driving. A center median Welcome Center would also serve as a back up area in the case of bridge closure, allowing travelers to choose alternate routes and stops. Traffic sitting and idling in long lines and burning fuel for long periods of time is not just a matter of inconvenience, but more importantly has an extremely negative impact on people's health as well as the environment, especially for individuals already susceptible to health problems. I personally have found myself waiting in line just to go north for an hour or more on many occasions.

In fact, I believe it would be wise for MDOT to place all rest stops in the center of the medians, instead of the redundant duplicating buildings, service and maintenance of these facilities that would not just save money, but would actually be of great use in case of highway emergencies. From an engineering perspective, utilizing CAD/CAM programs, this is something that could be accomplished by simply duplicating other existing centers and adjusting them to fit in the median rest areas. From a safety perspective, merging from the left-hand side of an express lane is common throughout the State of Michigan and the United States, and is not a plausible reason to deny this project. I have copied everyone on this list because I believe that this is an extremely important issue that I feel is being ignored for reasons I cannot understand. I am asking that you all take the time to review this proposal with an open mind. I sincerely thank you for your time and consideration, and look forward to working together to better serve our community.

Thank you for your consideration in this matter. If you have any questions, please feel free to contact me at the office at (810) 385-4489 or on my cell phone at (810) 650-0221.

Sincerely,



James E. Buckley, Supervisor
Charter Township of Fort Gratiot

(cc: next page)

cc: Governor Jennifer Granholm
✓ Senator Carl Levin
✓ Senator Debbie Stabenow
✓ State Representative Daniel Acciavatti
✓ State Representative John Espinoza
✓ State Representative Phillip Pavlov
✓ State Senator Judd Gilbert
✓ Shaun Groden, St. Clair County Administrator/Controller
St. Clair County Board of Commissioners
Bill Kauffman, Metropolitan Planning Commission
✓ Karl Tomion, City of Port Huron
Port Huron City Council
✓ Port Huron Area Chamber of Commerce
✓ Scott Beedon, Port Huron Township
Kirk Westin, St. Clair County Road Commission
Matt Wendling, Wilbur Smith Senior Project Manager
Douglas Alexaner, Economic Development Alliance
Dan Lane, St. Clair County Sheriff Dept.
✓ Fort Gratiot Township Business Association
BWB Plaza Advisory Committee
✓ Matt Webb, MDOT
✓ Larry Young, MDOT TSC Manager
✓ Jim Acheson, Acheson Ventures
Port Huron Times Herald
Bill Gilmer, Radio First

JEB:jms

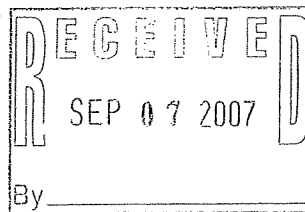


Charter Township of
Fort Gratiot

JAMES E. BUCKLEY
Supervisor

ROBERT C. CRAWFORD
Clerk

JUDITH A. REYNOLDS
Treasurer



September 7, 2007

State of Michigan Dept. of Transportation
Paul McAllister, Supervisor Project Coordination Unit
Murray D. Van Wagoner Bldg.
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. McAllister:

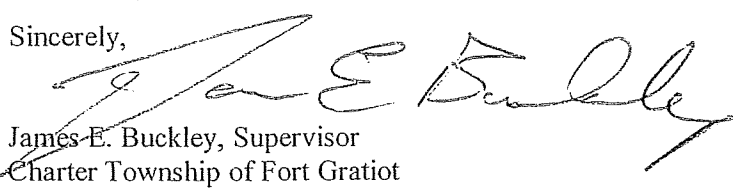
I recently sent a letter reiterating my great concern regarding the proposed location of the Blue Water Bridge Plaza Welcome Center. I have been attempting to work with MDOT representatives on this issue since March of this year, when the proposed location of the facility was presented to the municipalities and local area businesses, to no avail. The impact of the Blue Water Bridge project alone is going to be difficult for our community to withstand, even under the best conditions. The decline of the economy in our area, and across the State of Michigan, is going to make a difficult situation potentially devastating for local area businesses as it stands. Forcing our community to accept a Welcome Center in a location that further discourages travelers (and revenue) to our community is just too much to swallow.

If this issue continues to be ignored, I feel I would have no other option but to request extensive information concerning the matter under the FOIA act, which will certainly require a great amount of time and effort on your part that might be avoided had there been some degree of willingness to negotiate. Under the FOIA act, I would be requesting the items outlined below:

I will be requesting information pertaining to the Blue Water Bridge Plaza located in Port Huron, Michigan, hereto defined as the property owned by MDOT beginning at Stone Street, west to the Black River, and the width of the Plaza. This includes, but is not limited to: any and all reports, documents, investigational paperwork, files, notes, computer emails and files; engineering letters, notes and correspondence that address or pertain to any form of structural movement, settlement, decrease in structural integrity, dilapidation, heaving, and/or errors in construction, intentional or otherwise; improper engineering and inspections; and any other forms of communication that address any of the aforementioned issues which pertain to the existing Blue Water Bridge Plaza.

Again, I am sending this letter **prior** to issuing a formal FOIA request, for sole purpose of attempting to resolve this issue. Should you wish to discuss this matter or should you have any questions, please contact me at (810) 385-4489, or on my cell phone at (810) 650-0221.

Sincerely,


James E. Buckley, Supervisor
Charter Township of Fort Gratiot

cc: Matt Webb, MDOT
Larry Young, MDOT TSC Manager

JEB:jms

RESOLUTION

IN OPPOSITION TO THE BLUE WATER BRIDGE PLAZA STUDY DRAFT ENVIRONMENTAL IMPACT STUDY

CHARTER TOWNSHIP OF FORT GRATIOT
COUNTY OF ST. CLAIR, MICHIGAN

Minutes of a Regular Meeting of the Charter Township of Fort Gratiot Board of Trustee's, held on the 5th day of December, 2007, at the Fort Gratiot Township Hall, 3720 Keewahdin Drive, Fort Gratiot, Michigan; beginning at 7:30 o'clock p.m., Eastern Daylight Savings Time.

MEMBERS PRESENT: Bradley, Buckley, Crawford, Harder, Reynolds

MEMBERS ABSENT: Bruckner

The following Preamble and Resolution was offered by Member Harder and supported by Member Reynolds:

WHEREAS, the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA) have published a Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study which is dated August 10, 2007, with public comment being accepted from August 10 through December 10, 2007; and

WHEREAS, Section 1 of the DEIS does not accurately define the existing and future plaza needs, nor does it provide adequate justification to support the physical layout/size of the preferred alternative. As a result, there is not adequate justification provided for the Preferred Alternative's significant cost and negative impacts; and

WHEREAS, The DEIS must comply with relevant sections of the National Environmental Policy Act (NEPA) and its implementing regulations as well as several other State and Federal environmental laws; and

WHEREAS, the Department of Homeland Security has great concerns for the health, safety and security of citizens traveling throughout the United States, as does the Charter Township of Fort Gratiot.

NOW, THEREFORE, BE IT RESOLVED the DEIS fails to meet the requirements of NEPA and its implementing regulations. The DEIS is deficient because it fails to provide full public disclosure of impacts, does not adequately justify the project's costs/negative impacts, does not evaluate a reasonable range of alternatives, and does not provide adequate mitigation for the massive negative impacts which are anticipated. If MDOT is bound to use Alternative Plan #3, it should include an additional Black River Bridge crossing for Northbound traffic; and

BE IT, FURTHER, RESOLVED that the Charter Township of Fort Gratiot Board of Trustee's is unequivocally opposed to any Blue Water Bridge Alternate Plan that does not address pre-inspection, as well as the advancement of the Preferred Alternative until all of our comments regarding its justification, other reasonable alternatives, and mitigation measures are fully addressed to our complete satisfaction. Details regarding these shortcomings are provided in our official comment letter, which is attached to this resolution. (*See Attachment 1*)

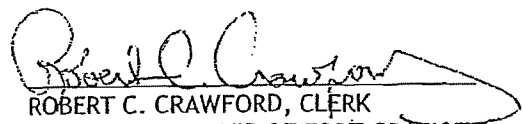
BE IT, FURTHER, RESOLVED that this Resolution be sent to Governor Granholm and to our State Legislators.

RESOLUTION DECLARED ADOPTED.

Ayes: Bradley, Buckley, Crawford, Harder, Reynolds

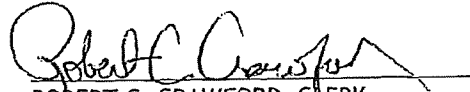
Nayes: 0

Absent: Bruckner


ROBERT C. CRAWFORD, CLERK
CHARTER TOWNSHIP OF FORT GRATIOT

CERTIFICATION

I, HEREBY, CERTIFY that the foregoing constitutes a true and complete copy of a Resolution adopted by the Board of Trustees of the Charter Township of Fort Gratiot, County of St. Clair, Michigan, at a Regular meeting held on December 5th, 2007, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976; and that the minutes of said meeting were kept and will be or have been made available, as required by said Act.


ROBERT C. CRAWFORD, CLERK
CHARTER TOWNSHIP OF FORT GRATIOT

Blue Water Bridge Plaza Study
Draft Environmental Impact Statement Comment Form

Name: James E. Buckley, Supervisor
Charter Township of Fort Gratiot
Address: 3720 Keewahdin Rd., Fort Gratiot, Michigan 48059
Contact: Phone: (810) 385-4489 Fax: (810) 385-9010 Email: jbuckley@fortgratiottwp.org

Comments:

1. Include pre-inspection of vehicles prior to entering the United States.
2. Allow easy access for travelers on and off the Blue Water Bridge.
3. Provide signals and signs along corridor and plaza area showing direction and distance to Fort Gratiot, Michigan, and other communities.
4. Construction of a much needed bridge over Black River (between Fort Gratiot Township and Charter Township of Port Huron) prior to Plaza/Corridor construction. An additional bridge has been needed for years, as it would allow alternate routes when accidents occur during construction, as well as helping relieve existing heavy traffic conditions. Since MDOT has expressed concern regarding safety, an additional bridge would be imperative, as all emergency hospitals are located in Port Huron south of the Bridge Plaza. The Environmental Impact Statement shows a hospital on North River Road in Fort Gratiot Township-this is *inaccurate*. The hospital they are referencing is actually located approximately 25 miles south in East China Township. The fact remains that *any* construction project will negatively affect Emergency Room access. An actual example: a two-car accident recently backed up traffic on Pine Grove for over 1 hour, *even with no construction at the Plaza*. In a worst-case scenario, *people will die*.
5. The proposed Welcome Center must be located in the median. A Welcome Center located in the center of the median would have the ability to service traffic from both directions, and would allow travelers to turn around and head back toward the Port Huron-Fort Gratiot area, providing much needed support for the financial condition of the area. Alternatives would make the trip back to the Port Huron-Fort Gratiot area an additional 18 miles. Inaccurate information given to us, such as the Federal Government does not allow Welcome Centers in the median anywhere in the United States due to Federal Regulations. When I personally addressed the Federal employee that made this statement in a public forum, he recanted this statement, stating "We don't *like* Welcome Centers/Rest Areas in the median."

When attending a meeting set up by Senator Jud Gilbert, (thank you) MDOT representative Paul McAllister stated the location of the Welcome Center was Federally regulated. When I pushed the issue and stating that I would like to take it to the Federal Government, McAllister (MDOT Supervisor, Coordination Unit) along with Matt Webb, recanted their position, stating that MDOT would *still* not allow this to happen, attempting to use safety issues as an excuse. The speed of the expressway in the proposed Welcome Center Location was increased approximately one year ago from 55 to 70 mph, sending high speed traffic up to Water Street with drivers having to make quick decisions regarding where they need to go and how they are going to get there. At 70 mph, a confused driver is SOL. 55 mph *would* and *should* be the maximum travel speed allowed through this area for safety reasons. I believe that the speed limit was raised for the sole purpose of making the Welcome Center unable to fit in the median area, as on and off ramps distance restrictions increase at 70 mph. Reducing the speed limit from Lapeer to Water Street adds and additional 30 seconds of travel time, but increases the safety and welfare of passengers in all vehicles traveling this route. This is my (and should be your) primary focus.

6. When the people elect leaders who are not willing to the right thing and act with common sense, or they hire of support people that impact the state with poor workmanship and poor decisions, such as we see now and have seen in the past with the existing Plaza having to be torn down and rebuilt due to ignorance, specifically cross-traffic weave, at the expense of the citizens of Michigan and throughout the United States, leaves the people to wonder if a leadership change is needed. If this project progresses in the way planned, *especially* after this information has been brought to light, then the leaders deserve replacement. The State of Michigan is in a depression. I see houses foreclosed on *every single day*, and people losing jobs due to companies not being able to pay health insurance, benefits, and even a fair wage. Yet, we take the ability to try to keep, create, or make jobs and the availability in easy traffic travel, and we hit a wall of resistance that are quick to make excuses, but lack any creative solution.
7. I would also like to reference the report sent from the City of Port Huron and the Coalition, (which is included) which points out there findings in the shortcomings of this project, and would like to also include the DLZ report as part of our report, demanding as representatives of the people of Fort Gratiot Township, *written, complete answers*. But more than that, common sense that addresses the people, jobs, and the future. Are you going to come to us in another 15 years and tell us that all of this must be changed again because of lack of imagination? For the sake of the people, I hope not. James Buckley, Supervisor of the Charter Township of Fort Gratiot, submits this to his board for consideration in support of Resolution, and so swears that the information he presents is true and believed to be factual, and presents this to the Board for support.

RESOLUTION

IN SUPPORT OF THE CITY OF PORT HURON REGARDING THE BLUE WATER BRIDGE PLAZA STUDY DRAFT ENVIRONMENTAL IMPACT STUDY

CHARTER TOWNSHIP OF FORT GRATIOT
COUNTY OF ST. CLAIR, MICHIGAN

Minutes of a Regular Meeting of the Charter Township of Fort Gratiot Board of Trustee's, held on the 5th day of December, 2007, at the Fort Gratiot Township Hall, 3720 Keewahdin Drive, Fort Gratiot, Michigan, beginning at 7:30 o'clock p.m., Eastern Daylight Savings Time.

MEMBERS PRESENT: Bradley, Buckley, Crawford, Harder, Reynolds

MEMBERS ABSENT: Bruckner

The following Preamble and Resolution was offered by Member Harder and supported by Member Reynolds:

WHEREAS, the Blue Water Bridge crossing between the U.S. and Canada is a vital link which enhances the economic prosperity of both countries.

WHEREAS, existing traffic delays at the primary inspection booths coming into the U.S. are at unacceptable levels, and considering security improvements at the plaza is a reasonable objective.

WHEREAS, the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA) have published a Draft Environmental Impact Statement (DEIS) for the Blue Water Bridge Plaza Study, dated August 10, 2007.

WHEREAS, the public comment period for the DEIS is from August 10, 2007 through December 10, 2007.

WHEREAS, the DEIS must comply with relevant sections of the National Environmental Policy Act (NEPA) and its implementing regulations as well as several other State and Federal environmental laws.

WHEREAS, since 2002, MDOT, FHWA, U.S. Customs and Border Protection (CBP) and U.S. General Services Administration (GSA) have studied various bridge plaza improvement options along with potential improvements to the I-69/I-94 corridor, including the bridge over the Black River.

WHEREAS, all three of the practical alternatives studied in detail in the DEIS (including the preferred alternative) would inflict massive negative impacts on the City of Port Huron and/or surrounding Townships.

NOW, THEREFORE, BE IT RESOLVED a supplemental DEIS is needed to address the shortcomings of the present DEIS, and to assure there is full disclosure/adequate opportunity for public comment at this stage in the process. It is not acceptable for our concerns to be addressed only in the Final Environmental Impact Statement.

BE IT, FURTHER, RESOLVED improvements to the I-69/I-94 corridor (including repairs to the Black River bridge) should be evaluated in a separate environmental document as previously planned by MDOT. It is not acceptable to delay improvements to this corridor while issues related to the bridge plaza are studied and debated.

BE IT, FURTHER, RESOLVED the proposed 65-acre size of the plaza facility is not justified based on the information presented in the DEIS. Another alternative with reduced size needs to be evaluated in detail and compared to the three practical alternatives presented in the DEIS.

BE IT, FURTHER, RESOLVED we are unequivocally opposed to advancement of the Preferred Alternative until all comments regarding its justification, other reasonable alternatives, and mitigation measures are fully addressed to our complete satisfaction.


BE IT, FURTHER, RESOLVED the DEIS fails to meet the requirements of NEPA and its implementing regulations. The DEIS is deficient because it fails to provide full public disclosure of impacts, does not adequately justify the project's costs/negative impacts, does not evaluate a reasonable range of alternatives, and does not provide adequate mitigation for the massive negative impacts which are anticipated. Details regarding these shortcomings are provided in the City of Port Huron's official comment letter, which is attached to this resolution. (See Attachment A)

RESOLUTION DECLARED ADOPTED.

Ayes: Bradley, Buckley, Crawford, Harder, Reynolds

Nays: 0


Absent: Bruckner



ROBERT C. CRAWFORD, CLERK
CHARTER TOWNSHIP OF FORT GRATIOT

CERTIFICATION

I, HEREBY, CERTIFY that the foregoing constitutes a true and complete copy of a Resolution adopted by the Board of Trustees of the Charter Township of Fort Gratiot, County of St. Clair, Michigan, at a Regular meeting held on December 5th, 2007, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976; and that the minutes of said meeting were kept and will be or have been made available, as required by said Act.



ROBERT C. CRAWFORD, CLERK
CHARTER TOWNSHIP OF FORT GRATIOT



(810) 990-1850 • P. O. Box 610305 • Port Huron, Michigan 48061-0305

Robert Funk, Co-Chairman • Arthur Smith, Co-Chairman

November 29, 2007

Mr. Bob Parsons
Public Hearings Officer
Michigan Department of Transportation
PO Box 30050
Lansing, MI 48909

RE: Comments on Blue Water Bridge Plaza Study Draft Environmental Impact Statement (DEIS) - **Bridge Plaza Business and Community Coalition, Inc.**

Dear Mr. Parsons,

We would like to thank the Michigan Department of Transportation (MDOT) for the opportunity to provide comments regarding the Blue Water Bridge Plaza Study DEIS. Below you will find a list of comments that our group has developed regarding the document.

Purpose and Need

We acknowledge that there is a legitimate need to improve the existing bridge plaza infrastructure in order to reduce processing delays and enhance security/accommodate new technologies. However, we have several areas of concern related to Section 1 of the DEIS and supporting technical reports. These concerns are as follows:

- Section 1 of the DEIS does not accurately define the existing and future plaza needs.
- Section 1 of the DEIS does not provide adequate justification to support the physical layout/size of the preferred alternative. As a result, there is not adequate justification provided for the Preferred Alternative's significant cost and negative impacts.

Specific details that support our concerns are presented below.

1. The DEIS and the supporting traffic technical report provide an overview regarding many relevant factors that will affect future traffic volumes crossing the Blue Water Bridge (BWB). These include regional and national population trends, trade agreements, economic conditions/forecast, SEMCOG's regional traffic model, historic trends, border plaza/security facilities, etc. However, it is not clear in these documents how this background information was used to decide upon the future growth rate that was applied to the existing traffic counts. We have been verbally informed by MDOT representatives (at the 10/3/07 meeting with the Coalition) that

the selected future growth rate was identified mainly based on an extension of historic long-term traffic trends. We are concerned that the written documents do not provide a definitive, clear, and well-reasoned justification for selection of the traffic growth rate which was used to develop the design-year traffic projection. Without this justification, the future traffic projections in the DEIS do not adequately support the need for the project, nor do they substantiate the negative impacts caused by the preferred alternative.

2. As MDOT is no doubt aware, the total volume of traffic crossing the BWB has declined notably since the year 2000. However, the DEIS attempts to make the case that long-term (i.e., 20+ year) trends should be used to predict the future growth rate for bridge crossing volumes. We believe that this is a flawed assumption because it ignores the fact that long-term historic trends were very heavily influenced by major infrastructure improvements and landmark international trade agreements. It is not reasonable to believe that similar events will continue to occur during the next 20 years. Specifically, major milestones that affected historic trends include:

- Completion of highway 402 in Canada in 1982
- Completion of various sections of I-69 between Lansing and Port Huron between 1987 and 1991
- Completion of I-69 from the Indiana border to Ontario in October 1992
- Construction of the elevated Blue Water Bridge Plaza in the mid 1990s
- Completion of the second bridge span in 1997
- Implementation of NAFTA during the 1990s

These one-time improvements/trade agreements contributed very significantly to historic bridge crossing growth trends. However, looking to the future, there does not exist anything comparable which would justify the growth rates that are used in the DEIS (i.e., none of the relevant capital improvement plans include such projects, and trade agreements similar to NAFTA are not pending/contemplated). If anything, the additional international crossing being studied in the Detroit area could draw traffic away from the BWB crossing.

A brief review of some recent MDOT traffic volume projections for the BWB demonstrates that our concerns are well founded because MDOT has consistently overestimated future traffic growth at this crossing. The first example is from the 1998 MDOT study that evaluated improvements to the plaza. We compared the actual truck volume counts for 2005 and 2006 against the forecasted crossing volumes from the 1998 study. This comparison showed that the 2005 truck forecast was high by 653,279 annual crossings, and the 2006 forecast was high by 1,003,325 trucks per year. This represents a daily overestimate of truck volumes by 1,789 for 2005 and 2,749 for 2006. Next, we compared the 2006 and 2007 forecasts presented in the BWB DEIS and traffic report against the actual crossing counts for these same periods. This comparison showed that for 2006, the actual truck counts are nearly 215,000 per year less than the high estimate forecast. Additionally, truck volumes from January 1, 2007 through July 31, 2007 show a 4.2% decrease compared to the 2006 actual counts. These examples lend credibility to our concerns because there is a demonstrated pattern of inaccuracy (i.e., always too high) with MDOT traffic projections at this location.

MDOT should revisit the traffic forecast and develop a revised forecast that is more reasonable and in line with the reality of what is actually happening here. This information should be made available for public review and comment (i.e., full disclosure) in a supplemental DEIS (i.e., it is our opinion that it would not be acceptable to try and address this deficiency in a Final EIS).

3. There does not appear to be any mention/discussion/analysis in the DEIS about the following topics and how they would affect BWB crossing volumes in the future:
 - The proposed third crossing in the Detroit area
 - New passport requirements for travel between the US and Canada
 - Canadian trash trucks

Discussion regarding these topics should be included in a Supplemental DEIS so that it can be thoroughly evaluated/commented upon by members of the public before advancing to the Final EIS stage of the NEPA process. Without this information, it is difficult to assess the validity of the needs presented in the DEIS.

4. The traffic technical report emphasizes the important role that population growth plays in predicting economic activity and crossing volume growth (page 2-8). The Midwestern region makes up 60%+ of the total trade value crossing the bridge. This region is expecting only 9.5% population growth over the 20-year forecast period. Yet total traffic volumes crossing the bridge are projected to go up by about 50% over this same time period. We understand that there may not be a direct correlation between population growth and bridge crossing volumes, but these statistics are so divergent that they appear inconsistent. When considered in conjunction with the comments noted above, this apparent inconsistency supports our concern about the reasonableness of the future traffic forecast. We believe that the traffic forecast should be revisited to examine this issue.
5. Section 1 of the DEIS does not provide anywhere near adequate detail/analysis regarding existing and future vehicle delays/queues at the plaza (not the surrounding intersections, but the actual plaza/primary inspection booths). When we have verbally inquired about this issue previously, we have been told by MDOT staff that these calculations cannot be released due to security concerns on the part of US Customs and Border Protection (CBP). Please provide a detailed and specific explanation as to why/how releasing this information would create security concerns. Without this detailed analysis of the existing and future baseline, the need for the project is not adequately documented in the sense that it is impossible to evaluate how well potential solutions (i.e., alternatives) address these problems. Related to this, the DEIS does not provide any benchmark or goal for the desired acceptable delays after plaza improvements are made. This is a very serious deficiency with the DEIS. We are, quite frankly, surprised and frustrated that after more than five years of studies and many millions of tax dollars expended, the DEIS is missing such crucial and fundamental information.

We have reviewed the DEIS for expansion of the Peace Bridge border crossing plaza located in the Buffalo/Niagara area of New York (<http://www.peacebridgex.com/deis.aspx>). This DEIS was prepared by the Peace Bridge Authority in cooperation with Federal Highway Administration (FHWA) and CBP, and the public comment period for the document just ended in October, 2007.

In virtually all relevant respects, the Peace Bridge border crossing and plaza study is indistinguishable from the BWB crossing. The consultant team that prepared the Peace Bridge DEIS included as the traffic consultant Wilbur Smith Associates, the same firm that MDOT has hired to prepare the BWB DEIS. The Peace Bridge document includes a very extensive analysis (dozens of pages with tables and figures) that presents bridge plaza delay times and queue lengths for existing conditions, future no build conditions, and future conditions for the alternatives they are considering. The document also includes CBP's stated goals for future vehicle delay times at the plaza. It is absolutely unacceptable for FHWA and CBP to refuse to provide this information in the BWB DEIS while simultaneously providing extensive details in the Peace Bridge DEIS. Clearly, the claim that security concerns require the withholding of this information is false, or the information would not have been included in the Peace Bridge DEIS. We are very disappointed that the citizens of Port Huron and Michigan have not received equal consideration and treatment compared to residents of Buffalo/Niagara, New York.

The claim that border crossing delays cannot be provided is further undermined by the fact that CBP actually maintains a website (<http://apps.cbp.gov/bwt/>) that has real time border delays listed. If CBP is providing real time delays on a website, it is not logical that existing and future theoretical delays cannot be included and analyzed in the DEIS.

6. Section 1 of the DEIS provides general information and broad statements about the need to enhance security and accommodate new security-related technologies. While we support these goals in concept, they do not by themselves provide adequate justification for a plaza size of 65 acres. The DEIS includes little if any specific information about how the projected traffic volumes relate to the required size and layout of the proposed plaza components. Without having more detailed information, it simply is not possible to assess whether any of the alternatives meet a legitimate need or not. We are requesting that section 1 be revised to include very specific information about the size/layout needs for each major component of the plaza. Discussion regarding these topics should be included in a Supplemental DEIS so that it can be thoroughly evaluated/commented upon by members of the public before advancing into a Final EIS.
7. As MDOT is aware, the Bay Mills Indian Community has proposed a casino development near the Blue Water Bridge plaza. If this development is constructed, it has been estimated that approximately 18,000 vehicles per day will visit the casino. These vehicles will come from both Canada and the U.S. For the DEIS traffic analysis, what assumptions were made regarding the effect of this development on traffic volumes/operations both crossing the BWB and on the local street network? We are concerned that the DEIS may not take into account this development, especially with regard to new local road infrastructure surrounding the plaza.

Based on these concerns, we do not believe that MDOT, FHWA, and CBP have met the required threshold for justification of the preferred alternative, nor do we believe that section 1 of the DEIS satisfies the requirements of the National Environmental Policy Act (NEPA) and its implementing regulations. We believe that section 1 of the DEIS needs to be substantially supplemented in order to provide full public disclosure, meet regulatory requirements, and justify the very extensive impacts caused by the preferred alternative. We believe that the deficiencies are substantial enough that MDOT, FHWA,

and CBP should prepare a Supplemental DEIS to provide full disclosure and an adequate opportunity for public comment (i.e., they cannot be handled solely in the Final EIS).

Alternatives

Similar to the comments provided above regarding the purpose and need, we do generally acknowledge that many of the infrastructure components which are included in the three build alternatives which were studied in detail in the DEIS are necessary. Nevertheless, section 2 of the DEIS is substantially deficient in several areas with regard to the specific components and characteristics of the three build alternatives.

8. As noted above, the DEIS does not include any specific information which evaluates border plaza delays and queues for the alternatives. Without this information, it is impossible to compare the options against each other to determine which option is preferable. It is also not possible to compare the likely benefits of the three build alternatives against the no build alternative to assess whether the purported reduction in delays justifies the negative impacts and costs of the build alternatives. Further, it is not possible to determine whether any of the options are meeting the project purposes if this information is not provided. The Peace Bridge DEIS provides a very detailed analysis of border plaza delays and queues for the alternatives which were considered for that project. Again, it is absolutely unacceptable that this information is withheld from the BWB DEIS when CBP and FHWA have provided the exact same information at another almost identical border crossing. Furthermore, it is not acceptable that this information is provided at a later date for the preferred alternative only – it needs to be available at the DEIS stage so that there is full disclosure, adequate opportunity for public comment, and good decisions can be made while selecting the preferred alternative. And finally, it is just simply disturbing and appalling that after more than five years of study at a cost of more than \$10 million in tax money, that such fundamentally important and readily available information has not been provided. It borders on absurd that almost half a billion dollars will be expended (resulting in massive disruption to the community) without a hard look at the benefits that are expected to result.
9. The DEIS does not evaluate a reasonable and representative range of alternatives with regard to different numbers of inspection booths and different levels of CBP staffing at the inspection booths. Instead, it appears that the number of inspection booths is the same for all three of the build alternatives. CBP staffing is not addressed for any of the alternatives. Both of these factors will have a considerable effect on delay times and queues, as well as the total acreage needed/size of the facility. Section 2 of the DEIS does not meet relevant NEPA requirements because both of these variables have a large impact on how well an alternative meets the project purposes/how much it costs/negative impacts it causes, yet there is no variability evaluated (i.e., a representative range of options is not compared). The Peace Bridge DEIS included information related to different numbers of inspection booths and included sensitivity analysis about how this affected delays and queues at the border plaza. If the information can be provided for the Peace Bridge, the same analysis should be done here. Without this information, full public disclosure has not occurred, and viable options may be excluded.
10. We note that there is a letter in the correspondence appendix from Kirk Steudle dated June 30, 2006 which states on page 7 that CBP has been unwilling to provide

any staffing commitments for the alternatives. Section 2 of the DEIS does not provide any information about CBP staffing levels for the alternatives. Without staffing commitments, it is not possible to perform an accurate analysis of how well an alternative meets the project purposes/needs. As a result, the DEIS is deficient because it does not provide full disclosure, does not evaluate a representative range of alternatives, and does not provide adequate analysis to support selection of a preferred alternative. This same letter from Mr. Steudle indicates a general lack of cooperation and responsiveness from CBP. CBP's lack of cooperation does not in any way relieve FHWA, CBP, and MDOT of their responsibilities to comply with all applicable statutes and regulations regarding preparation of this DEIS. MDOT needs to be more firm with CBP so that all agencies involved can meet the relevant regulations and laws. If CBP refuses to provide all needed information, MDOT should stop the study until it is made available.

11. The information provided in the DEIS does not adequately explain the need for a border plaza size of 65 acres. There is general reference made to modeling conducted using the BorderWizard software, but there is not enough specific information provided for members of the public to determine how this analysis was performed and if it is in fact accurate. The DEIS references the document entitled *U.S. Land Port of Entry Design Guide and Program Requirements* as the basis for the layout and sizing of the facilities at the plaza. We have requested through our consultants that a copy of this document be provided so that we can assess the layout and size of the plaza. To date, this document has not been provided. We are very concerned that the preferred alternative is considerably larger than what is actually needed to process traffic, accommodate future technologies, and ensure security. Representatives from the City of Port Huron have repeatedly asked for specific information to justify the 65 acres size, but this information has not been provided. They have also asked for information about other comparable border crossing plazas where similar facilities have been planned/constructed, but this information has not been provided by MDOT or CBP. We are also concerned that the plaza (City East and City West Alternatives) may not be laid out in the most efficient possible manner. As much as we would like to simply trust MDOT to get it right, the history at this location (i.e., weave caused by processing trucks on the left hand side of the bridge) leads us to be concerned about any layout prepared by the government agencies with authority at the plaza. Without the detailed information noted above and timely access to the *U.S. Land Port of Entry Design Guide and Program Requirements*, we are not able to perform a meaningful evaluation of the size and efficiency of the alternatives in the DEIS. Discussion regarding these topics should be included in a Supplemental DEIS so that it can be thoroughly evaluated/commented upon by members of the public before advancing into a Final EIS.
12. We have received written (email) confirmation from the Peace Bridge consultant team project manager that the Peace Bridge U.S. plaza alternative is 39 acres in size. This is what they called Alternative 1B-R3 ("Maximize Use of Existing U.S. Plaza") which is the same concept as the City East and City West alternatives in the BWB DEIS (Alt 1B-R3 is the only option in the Peace Bridge DEIS that has a plaza in the U.S.). The Peace Bridge DEIS looked at four build alternatives in detail, and the other three are all "reverse inspection" alternatives which are unlikely to be selected due to the failed US-Canadian negotiations on this topic. The size of this Peace Bridge plaza is inconsistent with the plaza size for the BWB project, and we believe

that the BWB plaza could be reduced in size to something similar to what is planned at the Peace Bridge.

We have compared the average daily crossing volumes for the two border crossings to see if possibly the difference in size might be due to different traffic volumes which require different facilities. Here are those volumes (rounded):

Peace Bridge 2006: 15,300 passenger cars, 3,600 commercial, 18,900 total

BWB 2005: 10,200 passenger cars, 4,900 commercial, 15,100 total

Peace Bridge 2030: 18,400 passenger cars, 6,900 commercial, 25,300 total

BWB 2030: 12,300 passenger cars, 10,000 commercial, 22,300 total

These traffic volumes do not provide the basis for the plaza size difference between the two locations. It is unacceptable for the citizens of Port Huron and Michigan to be treated differently than citizens of Buffalo/Niagara and New York. Based on this situation, we believe that MDOT, FHWA, and CBP have not considered a reasonable and representative range of options in the DEIS as required under NEPA. There should be a new alternative which is approximately 40 acres in size seriously evaluated in a Supplemental DEIS – if it can work for the Peace Bridge, it most certainly should be evaluated in detail at the Blue Water Bridge.

13. The Peace Bridge DEIS included detailed analysis of "reverse inspection" alternatives, though they clearly note that these cannot be selected as the final option in the ROD unless some type of agreement is reached between the U.S. and Canada. Recognizing that there will be a new Administration in Washington DC in about 14 months, they are keeping their options open which is prudent considering that it will be several years before construction begins on this project. We believe that MDOT has prematurely eliminated the reverse inspection alternative from the BWB study and that the DEIS should have analyzed this alternative in detail. Specifically, MDOT eliminated this option from the BWB study in 2003, three to four years before DHS Secretary Chertoff sent an official letter to the Canadians notifying them that the negotiations on this topic had failed (that letter is dated April 26, 2007). We are concerned that MDOT eliminated this alternative for the BWB project while negotiations with the Canadians were apparently still underway. Once again, we believe that the DEIS does not discuss in detail a representative range of alternatives because this option has been eliminated.

14. The proposed traffic control/maintenance of traffic plan, construction stage 2, would detour Pine Grove traffic to 10th Avenue and would remove Pine Grove between Hancock and 10th Avenue. This will result in a tremendous increase of traffic at the 10th Avenue and Pine Grove intersection. How will MDOT address traffic control problems at the 10th and Hancock intersection? We are very concerned that this plan will result in very long delays and possibly gridlock on the local street network.

Additionally, the DEIS does not address the impacts to Garfield Elementary School located within ¼ mile of the 10th Avenue/Garfield Street intersection. As noted above, a large amount of traffic will be diverted in this area, resulting in a massive traffic increase near the school. Issues that need to be addressed include pedestrian conflicts and safety, air quality, noise, traffic flow in and out of the school, and overall safety.

In stage 3 of the proposed traffic control plan the DEIS states that in-bound plaza traffic from Canada will use the newly constructed inspection lanes during this stage. "A temporary gate will be constructed on Hancock for cleared plaza traffic while the permanent exit ramps are constructed." How will the in-bound Canadian traffic be routed onto I-94/I-69 westbound once they exit the plaza through the temporary gate on Hancock? We believe this concept would be a disaster if implemented and would lead to complete gridlock on the surrounding street network. As a result, the economic impact to local business would be significant. Due to the long duration of construction, numerous businesses could potentially be forced out of business due to lack of access.

Considering these points, we believe that the DEIS does not provide nearly enough detail regarding the proposed traffic control/maintenance of traffic plan, its costs, and the negative impacts which will result during construction. We also believe that the plan (as proposed conceptually) may not actually work due to conflicts with the local street network which have not been analyzed. These issues need to be evaluated in detail in using a commonly accepted traffic model (such as SYNCHRO or comparable) to quantify the impacts. Discussion and analysis regarding these topics should be included in a Supplemental DEIS so that it can be thoroughly evaluated/commented upon by members of the public before advancing into a Final EIS.

We believe that the above-noted deficiencies are substantial enough that MDOT, FHWA, and CBP should prepare a Supplemental DEIS to provide full disclosure and an adequate opportunity for public comment (i.e., they cannot be handled solely in the Final EIS).

Existing Conditions and Impacts

Our comments regarding section 3 of the DEIS are provided below.

15. The preferred alternative is inconsistent with the city's land-use plan and zoning plan. This is yet another reason why MDOT needs to work very hard with FHWA and CBP to reduce the size of the new plaza's footprint to approximately 40 acres like the proposed new Peace Bridge plaza.
16. If we understand the information correctly in the DEIS, hardship right-of-way acquisitions that have already been completed are not included in the total calculations for a number of relocations, economic impacts, or tax base impacts. If this is true, the DEIS is not portraying an accurate picture of the true impacts of the alternatives. If this is true, the DEIS needs to be revised (Supplemental DEIS is needed) to provide a full disclosure of all impacts including those which are hardship purchases. The Supplemental DEIS will allow this issue to be thoroughly evaluated/commented upon by members of the public before advancing into a Final EIS.
17. The neighborhoods that will not be directly impacted (i.e., homes are not going to be purchased and demolished) by the preferred alternative will suffer cumulative impacts which are not fully disclosed in the DEIS. This area will be viewed as the new "buffer zone" and could realize a loss in perceived desirability and value. Per MDOT policy, there will be no compensation or additional amenities provided through the project that would alleviate this perception. The DEIS should identify cumulative

impacts to the homes that will become the new "front row" to the plaza. The DEIS should also assess the individual property value impacts to the remaining homes. These impacts include the potential for loss of value, increased noise, and visual impacts.

18. The City East and City West Alternatives would place upon the City of Port Huron a greater demand for emergency, police, and public works services presently not within the City's budget. In the post 9/11 era, small communities such as Port Huron have been asked to shoulder a greater degree of costs in keeping our nation safe and secure. The DEIS does not adequately address how these additional emergency services will be financed or what financial impacts they may have on the City. More detail is needed for full disclosure.
19. The construction impacts section of the DEIS does not fully recognize the magnitude of the impacts which will occur during construction. We believe that the local street network could become regularly gridlocked due to the proposed maintenance of traffic plan. This will have a devastating effect on businesses in the area and will greatly inconvenience the traveling public for several years. Additionally, the impacts to emergency service response during construction has not been adequately addressed in the DEIS. Discussion of wayfinding signs has not been included. Discussion regarding these topics should be included in a Supplemental DEIS so that it can be thoroughly evaluated/commented upon by members of the public before advancing into a Final EIS.
20. From information available to us, we could not determine if the noise analysis incorporated the expanded plaza as a noise source. The idling of trucks and vehicles and the accelerating of these vehicles would result in additional noise if it is not included in the noise analysis. If the analysis did not include this information, the DEIS needs to be revised based on additional analysis which includes this noise source.
21. The residences along Riverside and Hancock Street and 10th Avenue were not included in the noise study as noise receptors. These residences should be included as they will experience more traffic and/or will be the new front row to the expanded plaza. The results of this additional analysis needs to be included in the DEIS.
22. Noise receptor locations 73, 75, 106, 107, 172, and 174 will experience greater traffic volumes, roadways will be shifted closer to the residences, and/or they will be closer to the plaza, yet the future noise levels are predicted to decrease. Please explain how the noise model is predicting lower noise levels? If this is a mistake in the modeling, please provide revised analysis in the DEIS.
23. Sound waves will echo off of the large security and retaining walls that are part of the preferred alternative. We were not able to determine whether this phenomenon is reflected in the noise study which was conducted. If this was not factored into the TNM analysis, MDOT should update the analysis and the results presented in the DEIS.

24. The DEIS does not provide adequate disclosure of potential microscale air quality impacts caused by the alternatives. Specifically, the CO hotspot analysis was only conducted at the future Hancock Street and M-25 Connector intersection. Clearly, the primary inspection booths at the expanded Bridge Plaza will have the largest concentration of idling vehicles. The combined idling vehicle hours on the plaza will no doubt far exceed what would occur at the Hancock/M-25 intersection. Yet, no CO hotspot analysis was conducted for the Bridge Plaza. The DEIS needs to provide analysis results for potential CO levels at receivers near the Bridge Plaza.

The DEIS notes that PM_{2.5} is a serious health concern due to fine particles reaching the deepest regions of the lungs. It also notes that PM_{2.5} has serious health effects that include asthma, difficult/painful breathing, chronic bronchitis, and PM_{2.5} associated with diesel exhaust is also thought to cause lung cancer. The DEIS goes on to state the "diesel exhaust is a particular concern." Yet, the DEIS does not analyze the potential impacts of PM_{2.5} or PM₁₀ for any of the alternatives, nor does it provide a comparison of each alternative. With the potential for large numbers of idling diesel trucks on the plaza, it is important that the possible impacts of particulate matter are disclosed. While it may be true that there is no commonly accepted method for modeling PM_{2.5}, we believe that a project of this magnitude warrants development of a specialized methodology or, at a minimum, a qualitative comparison of the options. This further supports the need to fully disclose projected queues and delays at the border plaza as noted previously in our comments.

Once again, the Peace Bridge DEIS has done a much more thorough job than the BWB DEIS of documenting microscale air quality impacts. Their document appears to have included CO analysis for the Bridge Plaza, and they have included a very detailed analysis/results for PM_{2.5}. If this information can be provided by FHWA and CBP in the Peace Bridge DEIS, it should also be disclosed in the BWB DEIS.

25. The DEIS notes that the new proposed bridge over the Black River will increase the existing opening under the bridge, a fact that will help to offset any proposed fill in the 100 year floodplain. By allowing improved flow under the bridge, this would "ensure that no upstream flood elevations are affected". We have two concerns related to the floodplain crossing at this location. First, there is no analysis/information presented regarding potential floodplain impacts downstream from the crossing. If, as is claimed in the DEIS, a larger bridge opening conveys the floodwater more efficiently, the potential for flooding impacts downstream from the bridge may have been increased. This needs to be analyzed with the results disclosed in the DEIS. And secondly, relevant regulations require that potential projects such as this result in no harmful interference with floodwater elevations/conveyance. The DEIS does not provide enough details to confirm whether or not this threshold has been met. We are concerned that harmful interference with flood elevations may occur downstream from the bridge for the reasons noted above. The DEIS should be revised to address these issues.
26. While the DEIS does provide descriptive information about likely social and economic impacts, we believe that that the document does not adequately convey the severity of impacts when all of these individual factors are considered together. The cumulative impact assessment is lacking in this regard and needs to be substantially enhanced.

Mitigation

Our opinion is that the mitigation considerations and commitments included in the DEIS are not sufficient to address the social and economic impacts caused by the alternatives, especially the preferred alternative.

Our primary concern is that MDOT has not seriously considered creative mitigation opportunities which are ineligible for traditional funding sources. Specifically, the emphasis to date has been primarily on whether or not mitigation measures are eligible for Act 51 funding. We think that MDOT, FHWA, and CBP are not giving adequate consideration to the intent of mitigation under NEPA and its implementing regulations. As background, we wanted to include the following excerpts from NEPA and implementing regulations with our emphasis added in **bold**:

*The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, **and take actions that protect, restore, and enhance the environment.** (40 CFR § 1500.1(b): Purpose)*

*Federal agencies shall to the fullest extent possible: **Use all practicable means consistent with the requirements of the Act and other essential considerations of nation policy, to restore and enhance the quality of the human environment** and avoid or minimize any possible adverse effects of their actions on the quality of the human environment. (40 CFR 1500.2(f))*

The CEQ regulations define mitigation as:

- *Avoiding the impact altogether by not taking a certain action or parts of an action.*
- *Minimizing impacts by limiting the degree or magnitude of the action and its implementation.*
- *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.*
- *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.*
- ***Compensating for the impact by replacing or providing substitute resources or environments.** (40 CFR 1508.20)*

FHWA's mitigation policy states:

*Measures **necessary to mitigate adverse impacts will be incorporated into the action and are eligible for Federal funding when the Administration determines that:***

1. *The impacts for which the mitigation is proposed actually result from the Administration action; and*
2. *The **proposed mitigation** represents a reasonable public expenditure after considering the impacts of the action and the benefits of the proposed mitigation measures. In making this determination, the Administration will consider, among other factors, the extent to which the proposed measures would assist in complying with a Federal statute, Executive Order, or Administration regulation or policy. (23 CFR 771.105(d))*

It is a fact that this type of project is unprecedented in Michigan, and the severe impacts it will generate are likewise unprecedented in recent times, especially for a community the size of Port Huron. Considering this context, we believe that an unprecedented mitigation effort is likewise appropriate. We believe that such mitigation is consistent with the intent of NEPA and its implementing regulations which do not limit mitigation requirements to only those items that can be funded through sources which are traditionally used for other projects. We further believe that non-standard mitigation is both practicable and reasonable considering the context of this project. We would like MDOT to partner with the city of Port Huron and the Coalition to work with FHWA and CBP in order to seriously address this issue. We believe that this is a reasonable request because the city of Port Huron is being asked to bear a disproportionately high burden of the negative effects for a project which will benefit literally millions of citizens from across the United States and Canada.

We have the following specific comments regarding mitigation:

27. As a result of the Preferred Alternative, 137 households and 37 businesses will be relocated. The homes that will be lost are well-maintained, affordable, owner-occupied dwellings. High quality, affordable housing in a traditional neighborhood setting is difficult to find in St. Clair County. This neighborhood and the established neighborhood surrounding it are difficult to replace or duplicate within the City limits. Additionally, the DEIS accurately notes the project area is completely built out. The DEIS and Conceptual Stage Relocation Plan state that similar replacement housing is available and that comparable replacement properties are available for the businesses which would be purchased. We do not believe that enough detail has been provided in the DEIS regarding potential replacement housing or business locations. We would like to see a very specific analysis of where the replacement residential properties are located, whether these replacement properties are in a similar neighborhood setting, How the price ranges of displaced homes match up against available housing, school systems where located, etc. If these details indicate that the replacement residential housing is different than the current situation, such differences should be noted as impacts in the DEIS. For the 37 businesses which will be displaced, we have similar concerns. We believe that the DEIS notably understates the difficulty that these businesses will experience in order to become reestablished. Specifically, the DEIS needs to have more information regarding exactly where the potential replacement properties are located, whether potential replacement properties offer similar exposure to potential customers (i.e., where is the replacement property located relative to potential customers and major roadways), and other market/site specific variables that affect the viability and

profitability of the business. Additionally, the DEIS lumps all of the businesses into the same generic category when it assesses potential replacement opportunities. This is not appropriate, and the DEIS needs to have a specific evaluation of possible replacement properties for each type of business since the needs are very different among the various types of businesses. Performing this type of analysis will likely show that comparable replacement properties are not available for some of the businesses.

28. More information needs to be provided in the DEIS regarding how public and private utilities will be relocated. The City of Port Huron requires that its publicly owned utilities are located within a public right-of-way or an access easement to assure continual access (i.e., 24 hours per day, seven days per week). This means that MDOT will have to either: 1) relocate public utilities, or 2) provide unfettered access to the City. Additional details are needed in the DEIS to address this issue.
29. We would like to see a commitment in the DEIS that if there is eventually "excess" land created once the preferred alternative is constructed, MDOT will gift such properties to the City for redevelopment.
30. We are unclear as to how the alternatives will replace and enhance pedestrian access along the North/South corridors and the East/West (to the St. Clair River waterfront) corridors. We are requesting that the DEIS be revised to provide details about these facilities. We would also like to see these nonmotorized connections enhanced as part of the mitigation package.
31. The final environmental impact statement needs to include specific commitments with regard to context sensitive solutions (e.g., landscaping, wall treatments, nonmotorized facilities, etc.) that are agreed upon with the coalition and the city of Port Huron. We anticipate that this will require a significant coordination effort.
32. In our previous comments above, we have noted that the analysis of project needs and how well the various alternatives address the needs is deficient because it does not look at various CBP staffing levels. Many other conclusions about social/economic/environmental benefits and impacts depend directly on assumptions about CBP staffing levels. For example, the economic benefits which are anticipated will not be realized if delays are longer due to lower CBP staffing levels. In order to assure that the DEIS analysis is in fact accurate, it is critical that minimum CBP staffing levels are guaranteed. We believe that CBP needs to provide a guarantee of minimum staffing levels relative to delay times at the bridge plaza. Without this mitigation commitment, much of the analysis in the DEIS is mere speculation. Further, the negative impacts of the preferred alternative may not be justified if staffing levels are too low to assure limited delay times.
33. MDOT representatives have made broad and general statements that that the agency will work with the local communities and citizens in order to help identify possible resources which are outside the jurisdiction of MDOT. Examples cited include possible economic development grants or similar programs. While this general concept is admirable, no details regarding this potential partnership have been provided in the DEIS. We would like MDOT to provide a solid commitment which includes staffing and budget resources to help develop and implement this plan over the long term. We believe that the necessary commitment from MDOT will

need to be far greater than what has been discussed or envisioned to date. The commitment from MDOT regarding this topic should be commensurate with the massive impacts which will result from the preferred alternative. As a first step in this process, we would like to have specific meetings where this plan can be developed. We are requesting that the MDOT representatives who come to this meeting have the authority to commit the agency to the mitigation measures which are being discussed. We believe that FHWA and CBP representatives also need to participate in this process. It is our opinion that MDOT may need to hire a professional facilitator in order to come up with a solution that is acceptable to all parties.

34. Related to the preceding comment, we believe that the present situation represents a tremendous opportunity for MDOT and the city of Port Huron to join forces and capitalize on the strengths of the area surrounding the border Plaza. However, we sincerely believe that the potential for this area will not be realized unless both parties are willing to go beyond standard solutions and ways of thinking. We would like MDOT to commit to participate in and identify/secure funding for a visionary world-class economic development consultant to develop a plan for the area surrounding the border plaza. We believe that this type of mitigation is very appropriate considering the scale and types of impacts caused by the preferred alternative. Although this type of mitigation is not eligible for Act 51 funds, MDOT is definitely capable of partnering with the citizens of Port Huron to find a creative way to accomplish this task.
35. There are examples from around the country where FHWA has facilitated unique and creative mitigation for large-scale projects with massive impacts. This has included non-transportation funding sources. Some of the most notable case studies are identified and described on the website listed below. Here in Michigan, the I-696 project in Oak Park included funding from other federal sources. Also, in Seattle, FHWA has provided unique mitigation as well. This demonstrates that there is precedent within FHWA for providing creative and unique mitigation.
http://www.ciatrans.net/Community_Impact_Mitigation/CIM_Introduction.html

Other

36. The DEIS does not fully disclose the costs which the city of Port Huron budget/infrastructure will have to bear as a result of the proposed plaza alternatives. This includes providing emergency services and utilities. Taking this into consideration along with the other massive impacts which will be suffered by the community, we believe that it is reasonable that the bridge crossing tolls should be increased by a relatively small amount, and this revenue would be directed to the city of Port Huron.
37. The DEIS (page 1-24) says that construction of the preferred alternative is included in the regional transportation plan (RTP) for the years 2006-2010. We have looked at the RTP, and we note that the project is scheduled in the timeslot of 2011-2015. We also note that more than \$150 million in funding of the total \$390 million construction cost is coded as "private" on the detailed report for this RTP project. What private funding source has been assumed to cover this large portion of the funding? Also, we are concerned that the massive costs of maintenance of traffic during construction may not be fully accounted for in the cost estimate.

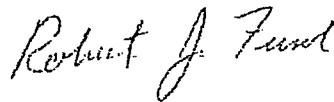
38. For the Preferred Alternative, the DEIS identifies the new international welcome center to be constructed on the north/west side of I-69/I-94 with access to and from the westbound travel lanes only. We are aware that MDOT has received inquiries about whether the welcome center could be located within the freeway median so that it could have access to/from both westbound and eastbound travel lanes on the freeway. We are requesting that MDOT consider whether relocation to the median would be feasible after taking into account the benefits and drawbacks of doing so.
39. We note that there was a Federal Register notice published on November 7, 2006 which indicated that the Black River bridge portion of the project would be evaluated in a separate NEPA document. However, we are unaware of a subsequent notice being published to join the two projects back into the same NEPA document. If there was not a subsequent notice informing members of the public that the two projects have been joined back together, we are concerned that MDOT did not follow customary procedures in this regard and may in fact have failed to follow regulatory requirements.
40. We do not believe that it is reasonable for the Black River bridge portion of the project to be joined together with the bridge plaza portion. Specifically, the Black River bridge portion of the project does not need to be bogged down while the controversial bridge plaza issues are debated. We believe that the Black River bridge portion of the project does have independent utility and logical termini which would allow it to receive separate environmental clearance. We are requesting that the Black River portion of the project be separated as was previously planned and advanced separately.
41. We are requesting that the DEIS be revised to specifically state that the City of Port Huron will not be requested or required to participate in any of the costs of the project.

Thank you for your time and attention to these comments.

Sincerely,



Arthur C. Smith, Co-Chairman

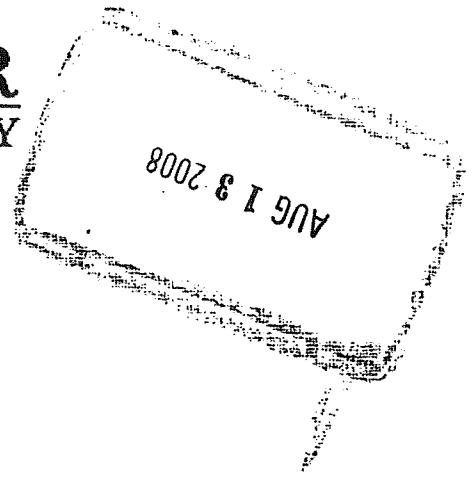


Robert J. Funk, Co-Chairman

Bridge Plaza Business and Community Coalition, Inc.
P.O. Box 610305
Port Huron, Michigan 48061-0305

cc: Matt Webb, Project Manager – MDOT

LAKE SUPERIOR STATE UNIVERSITY



August 11, 2008

Phillip M. Becker, P.E.
General Manager
International Bridge Authority
934 Bridge Plaza
Sault Ste. Marie, MI 49783

Dear Phil,

First let me thank you and your staff again for your great support on the Sault International Arts Festival launch on the bridge. The event went very well despite the rain and we have some memorable pictures (see www.lssu.edu) taken from the middle of the bridge.

Thanks also for sending your staff members to speak at our last Board meeting. It is helpful to get information about the forward plans and the complicated issues involved with the projects you have underway.

The Board asked me to convey that of the various projects and options they strongly encouraged that the widening of the bridge plaza be prioritized over the moving and re-building of the Joint International Bridge Authority's building. This is because the delays in crossing the bridge are significant for our students and the faster a solution can be found that moves traffic across the bridge faster, the better.

I should also note that of the two options that were outlined for the Bridge Authority building, the University favors the less expensive one that would not involve moving the building across the highway. This is for a number of reasons especially the desire not to have a parking lot or added traffic at the Easterday entrance to the campus.

We appreciate your work in involving the University in these important decisions.

Sincerely,

Rodney L. Lowman
President

Blue Water Bridge Plaza Study
St. Clair County, Michigan

MDOT J.N. 57779

Technical Memorandum
Delay Analysis

Prepared by:

The Michigan Department of Transportation



and

The Federal Highway Administration



December 12th, 2008

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Appendix A – Data**Appendix B – Delay Analysis Presentation**

Introduction

This technical memorandum analyzes existing and future delay at the Blue Water Bridge (BWB) plaza resulting from the proposed expansion of the Land Port of Entry (LPOE) in Port Huron, Michigan. The results show delay in the form of wait times and queue length at the existing plaza compared to the 2030 No-Build Alternative and the 2030 Recommended Alternative, given the same processing assumptions.

Need for Delay Analysis

The purpose of performing a delay analysis is to verify that the delay currently experienced on the BWB plaza will be improved after implementing the Recommended Alternative. This analysis was produced as a result of public comments received on the BWB Draft Environmental Impact Statement which was released in September 2007. Commenter's asked for additional justification of the anticipated performance levels from the Recommended Alternative and the associated facility improvements.

The Study Team used traffic analysis software to produce a microsimulation traffic model of primary inspection lanes based on average processing times. Primary inspection is the biggest cause for concern at the Blue Water Bridge Plaza as delay at this location results in major backups on the 402 expressway in Canada. Table 1 below shows the historic traffic backups in Canada between 2005 and 2007. Outbound traffic (heading east toward Canada) delays are far less frequent and are addressed with the improvements proposed to the I-94/I-69 corridor and BWB plaza which include separating local traffic from plaza traffic prior to the Lapeer Connector interchange and Water Street interchange, and providing 5-lanes for eastbound traffic compared to the existing 2-lanes. The proposed 8-tollbooths on the plaza can sufficiently process all outbound traffic at peak traffic times. Other factors which may cause a delay are very difficult to predict, such as Canadian inspections, and potential new CBP outbound processing requirements.

Table 1 Historic Backups into Canada

Border Crossing	Type of Backup	Frequency of Occurrences
Westbound to USA	Passenger Vehicles	Mainly associated with holidays and summer weekends
	Commercial Vehicles	Once a week on heavy commercial days
	Highway 402	Averages twice a month
	Severe Weather/	Once or twice a

	Vehicle Incidents	year
	Number of 1 Hour or Greater Delays:	
	2005	Not Available
	2006	26
	2007	117
Eastbound to Canada	Passenger Vehicles	Associated with holidays, summer weekends, or Canadian work related slowdowns
	Severe Weather/ Vehicle Incidents	Once or twice a year
	Number of 1 Hour or Greater Delays:	
	2005	8
	2006	6
	2007	25

Delay Analysis Model

To provide an accurate analysis of traffic operations on the Blue Water Bridge, it is essential that the entire border crossing be treated as a system. The toll facilities, bridge structures, customs facilities, approach roadways, and the off-site routing of agricultural inspections all affect traffic movements and delay times at the Port Huron port of entry. The Study Team utilized WATSim®, a computer simulation software, for the Blue Water Bridge delay analysis to model the proposed improvements.

WATSim is a microscopic traffic simulation model developed by KLD Associates, Inc. This model is an extension of the TRAF-NETSIM simulation model originally developed by KLD for the Federal Highway Administration (FHWA). The model's strength lies in its ability to accurately represent the performance characteristics of individual vehicles as well as driver behavior over the full range of decision processes.

WATSim models driver behavior to select the most appropriate toll, customs, or CBP lane based on current queue. Simulated drivers "decide" which lane will offer the fastest service based on a realistic assessment of current conditions. The model also simulates weaving and merging movements on the plaza and bridge and was utilized to calculate delay and the spatial extent and duration of queues based upon plaza processing times. Just as important, WATSim® represents driver behavior along the local road and freeway approaches and exits. This enables the simulation to accurately predict the effectiveness of the proposed improvements and confirm that plaza improvements do not result in adverse traffic operations on the I-69/I-94 corridor and the local roads downstream from the plaza.

The model was used to validate and calibrate a delay condition for inbound primary inspection based on the existing number of car and truck lanes, current volume of traffic, and existing average Customs and Border Protection (CBP) processing times. It should be noted that processing times are dependant on many factors that can produce significantly different results. For example processing times may vary greatly based on the national security threat level, the mix of vehicles, (trucks vs. cars), the types of contents of trucks passing through the plaza, and CBP staffing levels.

The existing model was validated and was then used to simulate Future 2030 Build and No-Build conditions and analyze traffic operations. Delay is a measure of the time added to the normal travel time of a particular movement travelling below the free flow speed.

Data Collection

The relationship between traffic volume and the corresponding wait time at the Primary Inspection Lanes (PILs) varies by time of year, CBP average processing times, national security level, the number of PILs open, and the number of lanes designated as truck or car only lanes based on demand. Therefore, it was important to select an existing traffic condition that reflected average wait times under a national security level of orange (elevated) on a typical busy day.

MDOT provided traffic and plaza operations data for the last week in July, 2008 as shown in Appendix A, based on the criteria above. The goal for the existing model was to provide validated processing capacities of the PILs in comparison to corresponding observed average queue lengths and wait times. These validated values for processing rates, queue length and wait time were then applied to the 2030 forecasted volumes to provide a prediction of the existing plaza under future traffic conditions and the proposed plaza. The Study Team selected Tuesday, July 29, 2008 as the sample to model, which demonstrated average heavy traffic volumes and queue lengths that reflected average wait times on an average busy day with all 13 PILs open, as summarized below in Table 2. The traffic volumes shown below are between 10 am and 4 pm, which were the heaviest volumes of that particular day. The data in Table 2 was taken from CBP's log from July 29th, 2008.

Table 2 Recorded Sample Traffic Data

Hour Ending	Cars	Lanes Open	Trucks	Lanes Open
Tuesday July 29th, 2008				
10 a.m.	418	5 + 1	160	6 + 1
11 a.m.	425	7 + 1	134	4 + 1
12 p.m.	359	7 + 1	140	4 + 1
1 p.m.	291	7 + 1	140	4 + 1
2 p.m.	391	6 + 1	134	5 + 1

3 p.m.	340	6 + 1	130	5 + 1
4 p.m.	348	7 + 1	102	4 + 1

In Table 2, the “+1” in the Lanes Open column designates an open FAST or Nexus lane. FAST (Free and Secure Trade) is a program between the United States and Canada to expedite processing of pre-screened trucks. Key to the effectiveness of this program is providing dedicated lanes for use by FAST vehicles. NEXUS is a program that allows pre-approved low risk travelers to enjoy a simplified border crossing process. NEXUS pass holders can use dedicated lanes at border crossings, thereby reducing their waiting time.

The data above at 11 am to 12 pm produced car queues to the center of the Blue Water Bridge with approximately 15 to 25 minutes delay, and truck queues from the U.S. inspection plaza over the bridge to the Canadian plaza with approximately 40 to 50 minutes delay as verified by MDOT Bridge personnel. This does not include CBP inspection time (approximately 1 to 3 minutes per vehicle) or the time taken to travel the same distance at free flow speed. It measures the time taken for a vehicle to travel from the queue end to the vehicle stop prior to U.S. Inspections excluding the free flow speed time. The average time for a vehicle to travel from the Canadian plaza to the stop prior to U.S. inspection at free flow speed is approximately 3 minutes based on an average speed of 30 mph over a distance of 1.3 miles. Therefore, delay is a measure of the additional time taken to cross the border on top of free flow time (Canadian plaza to U.S. plaza) and processing time, in this case equal to an average of 5 minutes.

The same data in Table 2 later in the day resulted in queues along the 402 expressway in Canada, with approximately 60 minutes of delay per vehicle. The Study team felt that modeling a truck queue length ending before the Canadian plaza provided the simplest case to calibrate the model. Other elements on the Canadian plaza such as tollbooths and stacked trucks make calibration more complicated and require more subjective assumptions. The selected queue length corresponds to an average truck wait time of approximately 35 minutes according to the *Western Hemisphere Travel Initiative Baseline Study*, prepared by Homeland Security as shown in the Appendix A, which further validates the queue lengths and wait times calibrated in the model.

Model Assumptions

To validate the existing model the following assumptions were made in conjunction with the inputs located in Appendix A.

- All PILs are open for processing (fully staffed)
- Car queues backup to center of bridge and truck queues backup to Canadian plaza during existing peak periods
- 17 percent of traffic uses FAST/NEXUS (both trucks and cars) for existing traffic
- A mid-week, mid-day peak hour model was used, Tuesday July 29th, 2008
- 7 car lanes, 4 truck lanes, 1 FAST lane, & 1 NEXUS lane were used

- Processing rates were deemed to be reflective of a national security level of orange on a typical day in July (2008)
- 25 percent commercial vehicles
- The validated average processing times were directly applied to the future No-Build scenario and the Recommended Alternative for 2030 traffic
- The FAST/NEXUS percentages were modified to 30% for the future models. There will be a capability in proposed plaza to have up to two FAST and two NEXUS lanes, but this model assumes only one FAST and One Nexus lane.

BWB Traffic Projections

To provide validation of the previously prepared traffic forecast the Study Team cross checked the recorded traffic volumes for July 29th, 2008 with the projected 2008 and 2030 Design Hour Volume (DHV) as shown below in Table 3.

In the Traffic Report two peak hours were calculated to represent the heavier car peak scenario typical of a summer Sunday and a heavier truck peak typical of a Tuesday, Wednesday, or Thursday in October.

Table 3 Design Hour Volume Traffic Data

Vehicle Type	2005 Summer DHV	Projected 2008 Summer DHV	2005 Fall DHV	Projected 2008 Fall DHV	2008 Recorded Traffic (07/29/2008 10am -11am)	2030 Car Vehicles Processed	2030 Truck Vehicles Processed
Car	777	797	298	306	418	944	362
Truck	86	98	237	268	160	181	496
Total	863	894	535	574	578	1,124	858

Table 3 shows that the mid-week volumes for 2008 fit within the range of forecasted 2008 volumes for car and truck peaks. The recorded 2008 volumes fit with the projected 2008 volumes forecasted from 2005 at an average growth rate of 4.4% for trucks and 0.9% for cars. This verifies that the 2030 forecast still represents a reasonable estimate of future traffic growth. The high growth truck forecast was used to assume a worst-case scenario for truck traffic.

The validated existing 2008 plaza model with assumptions as discussed above was applied to the 2030 traffic volumes for the car and truck peaks to establish a No-Build model to use as a comparison for the proposed Recommended Alternative. The same assumptions were then applied to the Recommended Alternative for car and truck peaks. Because the existing model was validated during a different peak period than the proposed peaks, a direct comparison can not be made between existing and no-build models. The existing traffic model was used simply to verify assumptions validated in the existing model to be applied to the future models.

Existing 2008 Model

The existing model was calibrated using the traffic volumes described in Table 2 with all 13 booths open as 7 car lanes, 4 truck lanes, 1 FAST lane and 1 NEXUS lane. The approach lanes on the bridge include the left lane for trucks, the center lane for FAST/Nexus vehicles, and the right lane for cars. The processing rates were assigned based on the same average rates observed for the time slot based on a national security level of orange. FAST and Nexus vehicles are processed separately and at a quicker rate than standard processing, therefore 17 percent of vehicles were set as FAST and Nexus vehicles. The results were validated to field observations as displayed in Table 4. Note that average delay is a measure of the time taken to cross the bridge in addition to a non-delayed travel time i.e. The normal time taken to cross the bridge from the Canadian plaza to the US plaza is approximately 5 minutes without any delay, therefore this would indicate 0 minutes of delay. In the example below 26.3 minutes of delay would equal a total travel time of approximately 31.3 minutes including the 5 minutes to travel the same distance without delay. This does not include the processing time at primary inspection.

Table 4 Model Outputs versus Field Observations

Description	Field Observations	Simulation
Vehicles Processed at Facility (per hour)	575 vehicles (average)	585 vehicles
Maximum Queue	Cars ~ 0.6 mile (half way across bridge) Trucks ~ 1.3 miles (close to Canadian Plaza)	Cars ~ 0.5 mile Trucks ~ 1.3 miles
Average Delay*	26.3 min/vehicle (weighted average)	22.3 min/vehicle (weighted average) Range: 13.4 to 33.8 min/vehicle

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

The results show that the existing model closely replicates the field observations on Tuesday July 29th, 2008 and hence confirms a validated model.

Proposed 2030 Models

The proposed traffic forecasts calculated truck and car Two different peak periods were analyzed; peak passenger traffic in July, and peak commercial traffic in October. These peaks are different to the peak used for the existing model (Tuesday, July 29th), providing a different

spread of truck and cars than the The FAST/Nexus traffic was assumed to increase to 30 percent of total traffic.

No-Build 2030 Model

The same assumptions and average processing times used for the existing model were applied to the existing plaza with 2030 traffic volumes based on fully staffed booths and optimized lane configurations. Below in Table 5 is the summary of results for 2030 passenger and commercial design hours.

Table 5 2030 No-Build Passenger and Commercial Results

	Passenger Design Hour	Commercial Design Hour
PILs Configuration	8 Car Lanes 3 Truck Lanes 1 FAST Lane 1 NEXUS Lane	4 Car Lanes 7 Truck Lanes 1 FAST Lane 1 NEXUS Lane
Maximum Queue	Cars – 1.7 miles Trucks – 1.5 miles	Cars - 0.1 miles Trucks – beyond model parameters (over 1.8 miles)
Average Delay*	31.8 minutes/vehicle	19.5 minutes/vehicle
Delay Range	20.0 to 43.3 minutes/vehicle	16.0 to 27.2 minutes/vehicle
Hourly Throughput	814 Total vehicles processed in model	696 Total vehicles processed in model

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

The 2030 No-Build results show that the existing plaza would experience greater delays and backups in 2030 than with existing traffic for commercial and passenger design hours.

Proposed 2030 Build Models

The same assumptions and average processing times used for the existing model were applied to the proposed plaza with 2030 traffic volumes. The same peak periods used for the future No-Build model were used for the future peak along with the high range volumes from the traffic forecast. The reason for using the high range forecast was to analyze a potential worst case scenario. The model assumes that all 20 future Primary Inspection Lanes (PILs) are operational. The results for the passenger and truck 2030 design hours are presented in Table 6.

Table 6 Passenger and Commercial Results

	Passenger Design Hour	Commercial Design Hour
PILs Configuration	13 Car Lanes 5 Truck Lanes 1 FAST Lane 1 NEXUS Lane	5 Car Lanes 13 Truck Lanes 1 FAST Lane 1 NEXUS Lane
Maximum Queue	Cars – contained within plaza	Contained within plaza area

	Trucks – contained within plaza	
Average Delay*	3.4 minutes/vehicle	3.1 minutes/vehicle
Delay Range	2.8 to 4.2 minutes/vehicle	2.5 to 3.6 minutes/vehicle
Hourly Throughput	944 Cars DHV 166 Trucks DHV 1110 Total vehicles processed in model	348 Cars DHV 496 Trucks DHV 844 Total vehicles processed in model

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

The results show that given the proposed plaza configuration and the 20 PILs operational, all traffic in the passenger and commercial design hours can be adequately processed with minimal delay. It is important to note that the two scenarios modeled are based on the following factors:

- Proposed 2030 DHV forecast
- Average CBP processing times
- Fully staffed booths
- A set booth configuration
- No downstream impact on booth operation

All of the factors above are fluctuating variables that will affect the operation of the PILs. However, the 2030 models developed provide a level of confidence that given two conservative design hours the proposed plaza will operate well. The delay analysis results are summarized in Table 7 below.

Table 7 Delay Analysis Summary

Model Output	Passenger Peak		Commercial Peak	
	Future No-Build	Future Build	Future No-Build	Future Build
Vehicles Processed per hour	814	1110	696	844
Average delay* (min/veh)	31.8	3.4	19.5	3.1
Maximum Queue Cars	1.7 miles	Within Plaza	Within Plaza	Within Plaza
Maximum Queue Trucks	1.5 miles	Within Plaza	Beyond Study Area (>1.8 miles)	Within Plaza

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

Sensitivity Check

In order to provide a level of confidence of how close to capacity the proposed model plaza would be operating during the two design hours, a sensitivity check was developed. The number of PILs open during the passenger and trucks design hour models were decreased to assess the change in delay given the same traffic loads. During the passenger peak, commercial booths were closed and during the commercial peak, passenger lanes were closed to see the affect on delay. Below in Tables 8 and 9 are the summary of the sensitivity results.

Table 8 Sensitivity of Passenger Results

Case	Delay*	Maximum Queue (Cars)	Maximum Queue (Trucks)	Vehicles Processed per hour
18 Staffed Lanes	3.4 minutes/ vehicle	Within Plaza	Within Plaza	1110
15 Staffed Lanes	9.2 minutes/ vehicle	Within Plaza	Beyond Study area (more than ½ mile beyond Canadian Plaza)	1036
13 Staffed Lanes	15.5 minutes/ vehicle	0.1 mile	Beyond Study area (more than ½ mile beyond Canadian Plaza)	922
No-Build 11 Staffed Lanes	31.8 minutes/ vehicle	1.7 miles	1.5 miles	814

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

Table 9 Sensitivity of Commercial Results

Case	Delay*	Maximum Queue (Cars)	Maximum Queue (Trucks)	Vehicles Processed per hour
18 Staffed Lanes	3.1 minutes/ vehicle	Within Plaza	Within Plaza	844
15 Staffed Lanes	19.5 minutes/ vehicle	1.0 mile	Within Plaza	705
13 Staffed Lanes	22.8 minutes/ vehicle	1.0 mile	0.5 mile	668
No-Build 11 Staffed Lanes	23.7 minutes/ vehicle	Within Plaza	Beyond Study area (more than ½ mile beyond Canadian Plaza)	539

* Delay is the queue time from beginning to end not including the time taken to drive the same distance at free flow speed (delay = total wait time in queue – normal travel time).

During the passenger design hour, the model predicts that closure of 3-commercial lanes would result in severe delay into Canada. During the commercial design hour, the model predicts that closure of 3-passenger lanes would result in some additional delay.

Conclusion

Based on the delay analysis summarized in this report and the assumptions made pertaining to traffic volumes and the Port Operating Requirements provided by CBP, the proposed Recommended Alternative appears to have an appropriate number of primary inspection lanes to significantly reduce future delays at the Port Huron POE.

Appendix A – Data

Blue Water Bridge Authority VEHICLES BY HOUR

Page: 1
Date: 9/11/2008
Time: 11:05:23AM

ReportID: T01
From: 07/28/08 12:00:00 AM To: 07/28/08 11:59:59 PM

Lane(s): All Mon

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	Totals
Car/RV																									
Single Vehicle	110	35	44	33	43	69	165	217	360	443	489	464	458	410	363	335	356	354	297	186	198	129	104	62	5,724
SubTotal:	110	35	44	33	43	69	165	217	360	443	489	464	458	410	363	335	356	354	297	186	198	129	104	62	5,724
Car/RV/Ex-Axl																									
Car+1 axle	1	1	3	1	0	2	2	4	6	1	1	6	6	8	10	10	5	3	5	0	5	0	2	2	86
Car+2 axles	0	2	0	0	0	0	1	1	3	5	6	6	6	9	3	2	4	0	3	1	5	2	0	2	61
Car+3 axles	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3
SubTotal:	1	3	3	1	0	2	3	5	11	7	7	12	12	18	13	12	9	4	8	1	10	2	2	4	150
Bus																									
2 axles	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3 axles	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	1	1	0	2	2	1	1	0	0	11
SubTotal:	0	1	0	0	0	0	0	2	1	0	0	0	1	0	0	1	1	0	2	2	1	1	0	0	13
Truck																									
2 axles	2	1	4	2	1	3	8	6	8	4	8	4	7	3	10	7	7	4	8	4	10	5	5	2	123
3 axles	3	0	0	0	1	2	2	3	3	1	0	2	1	2	0	1	1	1	2	3	2	4	1	0	35
4 axles	0	0	0	1	0	1	0	0	1	2	1	0	1	4	1	2	2	0	3	0	1	2	1	0	23
5 axles	36	31	22	40	54	56	60	58	84	56	78	63	71	67	99	124	71	124	102	85	90	101	72	51	1,695
6 axles	0	2	2	2	3	4	6	3	4	5	4	2	3	2	3	14	4	2	3	2	1	3	2	1	77
7 axles	0	2	0	2	6	4	4	3	4	2	4	2	1	2	3	8	2	2	1	2	1	2	0	0	57
8 axles	2	5	6	7	8	5	5	8	8	9	9	4	1	3	4	1	1	0	2	0	2	0	1	7	98
9 axles	5	7	11	16	26	49	40	43	37	38	38	17	19	11	17	4	4	3	1	4	6	7	3	2	407
10 axles	1	2	1	0	0	2	4	2	2	3	1	0	0	0	1	0	1	2	0	1	2	3	1	0	29
11 axles	0	0	1	0	1	0	0	0	1	2	2	1	1	1	2	3	1	0	0	0	0	0	0	0	16
SubTotal:	49	50	47	70	100	126	129	126	152	122	145	85	105	95	140	164	94	138	122	101	114	127	86	63	2,560
Total:	160	89	94	104	143	197	297	350	524	572	641	571	576	523	516	512	460	495	429	290	323	259	192	129	8,447

Blue Water Bridge Authority VEHICLES BY HOUR

Report ID: T01

From: 07/29/08 12:00:00 AM To: 07/29/08 11:59:59 PM

Lane(s): All

Tol

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	Totals
--------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	---	--------

CarRV																									
Single Vehicle	41	28	25	21	39	56	123	183	321	411	412	350	278	384	326	339	286	310	251	200	136	112	86	61	4,791
SubTotal:	41	28	25	21	39	56	123	183	321	411	412	350	278	384	326	339	286	310	251	200	136	112	86	61	4,791

CarRV/Ex-Axi																									
Car+1 axle	0	0	0	0	0	2	0	0	3	5	3	6	2	4	7	5	0	0	0	2	0	1	0	0	40
Car+2 axles	0	1	0	0	1	0	0	2	2	2	10	3	11	3	7	3	5	3	2	2	0	2	0	0	59
Car+3 axles	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	4
SubTotal:	0	1	0	0	3	2	0	2	5	7	13	9	13	7	14	9	5	3	2	4	0	4	0	0	103

Bus																									
2 axles	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3 axles	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5
SubTotal:	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	6

Truck																									
2 axles	2	4	3	4	3	2	8	4	12	10	7	7	13	8	12	4	7	8	8	10	4	2	8	6	156
3 axles	5	0	1	0	1	0	1	2	4	0	0	4	1	1	2	0	1	0	1	1	1	1	2	0	29
4 axles	0	1	0	0	1	0	0	2	3	1	0	0	0	0	1	2	4	1	0	2	0	0	0	0	18
5 axles	50	44	44	43	68	82	67	72	88	89	74	88	94	103	90	83	81	113	104	118	83	72	56	65	1,872
6 axles	0	1	2	3	2	4	2	2	3	8	5	3	6	4	6	2	1	1	1	2	2	1	2	3	66
7 axles	0	2	1	3	4	5	5	5	2	3	5	5	3	2	3	3	0	4	2	2	1	1	0	1	62
8 axles	4	3	6	9	7	11	7	10	10	12	4	10	3	1	3	0	2	0	1	0	1	1	3	5	113
9 axles	2	5	13	19	27	38	47	43	31	32	35	22	20	13	11	7	5	2	9	6	9	6	2	4	408
10 axles	0	0	3	3	2	6	4	3	4	3	3	0	0	1	2	0	4	5	1	0	2	1	0	1	48
11 axles	0	0	0	0	0	0	0	0	0	2	1	1	0	1	0	1	1	0	1	0	0	0	1	0	9
SubTotal:	63	60	70	84	116	148	141	143	167	160	134	140	140	134	130	102	106	134	128	141	103	85	74	85	2,781

Total:	104	89	98	105	159	206	265	328	484	578	559	499	431	526	470	450	337	447	392	345	241	201	161	145	7,681
--------	-----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

Blue Water Bridge Authority VEHICLES BY HOUR

Report ID: T01

From: 07/30/08 12:00:00 AM To: 07/30/08 11:59:59 PM

Page: 1
Date: 8/11/2008
Time: 11:05:32AM

Lane/sk All

Wed

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	Totals
Car/RV																									
Single Vehicle	49	29	23	27	36	75	126	204	329	382	429	417	362	336	411	347	417	314	249	240	176	164	124	60	5,326
SubTotal:	49	29	23	27	36	75	126	204	329	382	429	417	362	336	411	347	417	314	249	240	176	164	124	60	5,326
Car/RV/Ex-Axl																									
Car+1 axle	1	0	0	0	1	1	1	1	3	4	2	3	4	7	2	3	1	5	7	3	1	1	0	0	51
Car+2 axles	1	0	0	0	0	0	0	0	2	7	6	4	6	3	2	2	1	3	0	2	7	2	0	1	49
Car+3 axles	0	1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
SubTotal:	2	1	0	0	1	2	2	1	5	11	8	7	10	12	4	5	2	8	7	5	8	3	0	1	105
Bus																									
2 axles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3 axles	1	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	6
SubTotal:	1	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	1	7
Truck																									
2 axles	1	1	0	3	5	4	5	5	17	5	7	10	9	6	7	12	8	7	8	9	5	3	6	1	144
3 axles	0	0	2	0	2	2	5	3	1	4	5	3	1	2	5	1	1	2	0	5	1	1	2	0	48
4 axles	1	0	0	0	3	0	1	0	1	1	1	0	4	1	1	0	1	1	0	0	2	1	0	0	19
5 axles	44	35	50	52	78	72	69	77	80	81	96	51	111	93	124	68	111	114	110	106	81	73	80	64	1,920
6 axles	2	2	2	2	5	2	1	3	8	5	2	1	7	5	7	4	0	5	2	4	2	0	5	3	79
7 axles	0	0	0	1	7	6	3	4	4	4	3	2	8	1	1	1	3	4	2	0	1	0	0	1	56
8 axles	6	2	7	7	6	7	7	9	8	15	3	2	6	0	2	1	1	1	1	1	1	0	1	5	99
9 axles	4	12	12	20	30	48	43	31	31	42	39	14	17	18	14	4	4	1	8	4	7	7	3	4	417
10 axles	1	3	0	0	1	2	3	4	7	1	2	2	2	1	1	1	2	2	1	6	3	3	3	2	53
11 axles	0	1	0	0	0	0	1	2	1	3	1	0	0	0	1	1	2	2	2	2	0	0	0	0	19
12 axles	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
13 axles	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SubTotal:	59	56	73	85	137	143	138	138	168	161	160	85	166	127	163	93	133	139	134	137	103	88	100	80	2,856
Total:	111	86	96	112	174	220	268	343	492	554	590	509	538	475	678	445	552	462	391	382	267	255	224	142	8,294

Blue Water Bridge Authority

From: 07/31/08 12:00:00 AM To: 07/31/08 11:59:59 PM

Lane(s): All

THOR

Date: 9/10/2008

Time: 8:25:28AM

Vehicle Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	0	Totals
Car/RY																									
Single Vehicle	68	39	37	35	31	72	130	234	345	455	400	314	373	352	417	480	440	374	290	354	232	211	183	129	6,004
SubTotal:	68	39	37	35	31	72	139	234	345	455	400	314	373	352	417	480	440	374	290	354	232	211	183	129	6,004
Car/RY/Ex-Axl																									
Car+1 axle	1	0	0	0	1	2	3	1	2	0	9	3	11	4	11	2	3	5	6	2	2	4	3	1	76
Car+2 axles	1	2	1	0	0	0	0	1	3	6	5	10	11	6	9	5	4	3	10	3	9	6	5	1	101
Car+3 axles	1	0	0	0	0	0	0	3	0	0	0	0	1	1	1	0	1	3	0	0	1	1	1	0	14
Car+4 axles	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
SubTotal:	3	2	1	0	1	2	4	5	5	6	14	13	24	11	22	7	8	11	16	5	12	11	9	2	194
Truck																									
2 axles	3	5	3	4	1	5	4	12	13	10	5	6	11	5	15	6	11	10	8	4	4	8	2	0	156
3 axles	2	1	0	1	0	3	1	2	3	2	2	2	0	1	4	2	2	1	0	0	1	0	3	0	33
4 axles	1	0	1	0	0	0	1	1	0	1	2	0	2	0	4	1	1	1	0	0	0	0	1	0	17
5 axles	75	41	30	46	55	58	67	65	78	71	68	80	72	46	105	89	116	117	99	45	68	42	59	69	1,563
6 axles	3	2	2	3	2	2	6	4	4	9	1	5	4	6	5	4	2	5	1	1	4	1	2	1	79
7 axles	2	0	1	3	3	8	8	3	5	2	4	4	1	2	1	0	3	3	0	2	2	0	0	2	50
8 axles	5	5	7	4	11	9	12	13	9	13	5	1	2	4	1	1	3	0	2	2	0	1	1	7	118
9 axles	4	11	16	15	33	47	47	28	29	37	29	25	23	12	18	9	7	6	5	8	4	4	1	3	421
10 axles	4	5	1	0	2	2	7	3	4	2	2	1	2	1	2	2	5	1	1	2	1	2	1	1	54
11 axles	0	0	0	0	0	0	2	1	1	2	2	1	3	2	4	1	2	1	0	0	0	2	1	1	26
13 axles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
SubTotal:	99	70	61	76	107	135	155	132	147	149	120	125	120	79	160	115	153	145	116	65	84	60	71	84	2,628

Total:

170	111	99	111	139	209	298	371	497	510	534	452	517	442	599	602	601	530	422	424	328	282	263	215	8,826
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1Date	Traffic back-ups-reasons, etc
Oct.11-06	Cars and trucks backed up. Started with 4 truck lanes + Fast and 4 car lanes, and then went down to 3 car lanes. They stated budgetary reasons.
Oct. 16, 2006	Cars backed up. They have only 3 car lanes open all day because they are short staffed. Trucks backed up. They have 5 + Fast. They say they are having computer problems.
Oct.17, 2006	4:50am: Trucks backed up...said lane #7 was having computer problems. Had 5 + Fast open. 12pm: Trucks still backed up and now cars are backed up. 4 car lanes and 5+Fast truck lanes. They say they are short staffed. Trucks-cleared at 10:15pm.
Oct.18,2006	0430 to 2000 hrs trucks backing up as far as <u>Blackwell</u> at times. 5 + F till 1300 hrs then 6 + F after.
Oct.18,2006	6.30 pm backed up to <u>Indian Road</u> . Back up over 8.30 pm
Oct.19,2006	We started holding trucks at 4.30 am.5 + FAST open according to MDOT
Oct. 20 - 2006	5: a.m. it started (4 + FAST open) Backed up when I came in (to corner) clear at 8:a.m
Oct. 20, 2006	5:30 p.m. Cars and trucks backing up. 5 truck lanes open - 5 car lanes and Nexus. Sharon called Customs and they said that is all they can open.
Oct 20	7 pm trucks were backed up to corner

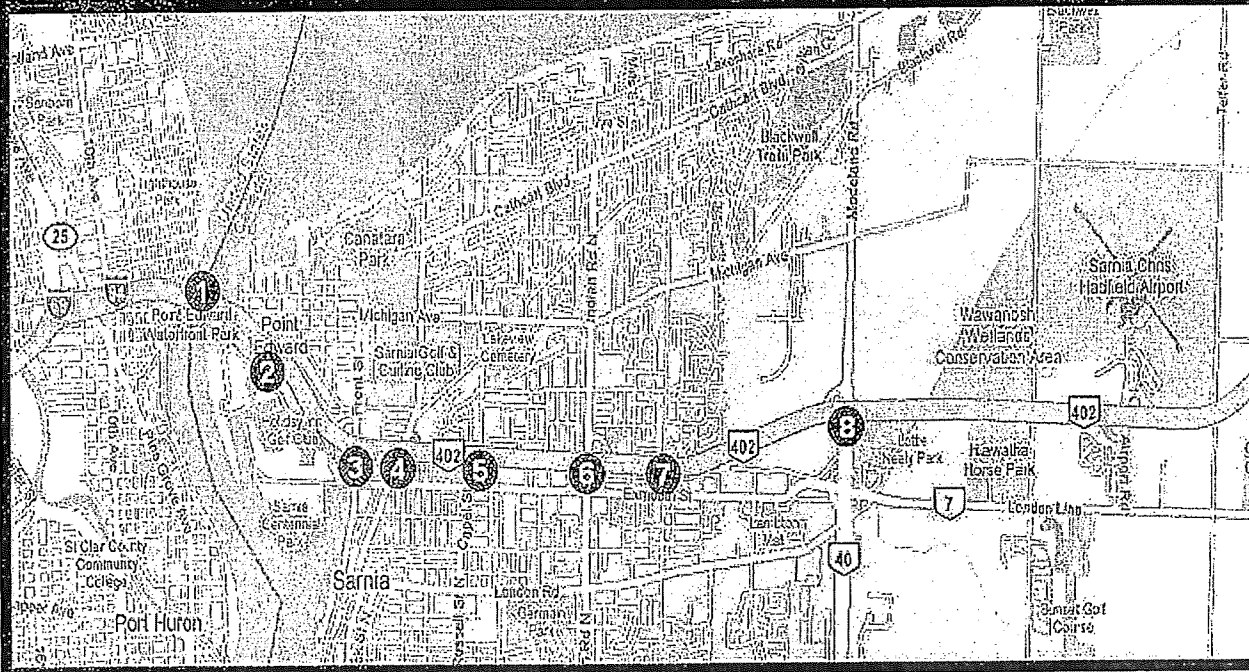


APPENDIX B – BENCHMARKING SYSTEM USED BY BWBC AND CBP

In September 2007, a survey was performed by BWBC and CBP to determine wait times from various inbound points into the U.S. The guidance document below was created and serves as the benchmarking guidance tool for use by CBP supervisors. There are plans to re-validate the guidance document on a regular basis.

Border Wait Time Analysis - Port Huron (ave times) 09/13/2007

	Mid Span	Toll Booth	Front St	Christina St	Colburn Rd	Murphy Rd	Indian Road	Modeland Rd	Airport Rd
Distance	1.0k	2.2k	2.0k	3.5k	4.5k		5.4k	6k	10.8k
	27	60	65	60	57	0	53	60	0
	31	69	53	49	65		115	120	
	25	31	39	52	71		93	135	
	30	32	42	67	83		75	109	
	35	78	60	72			83	123	
		28	57				88		
		23	33				91		
		35							
		30							
	①	②	③	④	⑤	⑦	⑥	⑧	
AVE									
MIN	30	44	51	60	68	0	65	113	0
		35	45	60	75	115	90	120	



Appendix B – Data

BLUE WATER BRIDGE DELAY ANALYSIS



September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Outline

- WATSim Simulation Software
- Simulation Models
 - Existing Conditions
 - Future No-Build Conditions
 - Commercial Peak
 - Passenger Peak
 - Future Build Conditions
 - Commercial Peak
 - Passenger Peak
- Sensitivity Studies

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Project Objective

- Construct a validated/calibrated simulation model representing existing conditions
- Construct simulation models of Future Build and Future No-Build conditions
- Analyze traffic operations for Future year (2030) conditions

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



WATSim Simulation Software

- Microscopic traffic simulation
- Represents individual vehicles and driver decision processes
- Extension of FHWA's TRAF-NETSIM
- Includes a model expressly designed for toll plazas – GENTOPS
- Developed with funding from NYSERDA and New York Bridge Authority
- Applied extensively to facilities across the country

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



WATSim Simulation Software

- Clients include
 - CALTRANS
 - Port Authority of New York and New Jersey
 - Metropolitan Transportation Authority of New York
 - Pennsylvania Turnpike Commission
 - Delaware Joint Toll Bridge Commission
 - New York State Thruway Authority
 - New Jersey Turnpike Authority

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Existing Conditions

- Inbound Plaza: 13 lane facility
- Operations vary by time of year and time of day
 - 1 lane for FAST
 - 1 lane for NEXUS
 - Varying levels of CBP staffing and processing times
 - Truck and Car lanes opened based on demand
- Allocation of approach lanes on bridge
 - Left Lane – Trucks
 - Center Lane – FAST/NEXUS
 - Right Lane – Cars
- Peak passenger operations July/August
- Peak commercial operations May/October

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Field Data

- Traffic Volumes – peak period traffic volumes estimated from 2005 AADT counts
- Signal Timing Plans - peak period signal phasing and timing (SYNCHRO)
- Daily traffic data including hourly processing times from CBP for the week of July 28, 2008
- Inbound plaza delay and queue observations for the week of July 28, 2008

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Model of Existing Conditions

- Mid-week, mid-day peak hour model
- Fully staffed
- 7 Car lanes, 4 Truck lanes, 1 FAST lane and 1 NEXUS lane
- Processing Rates
 - Normal CBP processing rates
 - Visual observations
 - Orange threat level
- 17% of traffic uses FAST or NEXUS
- 25% commercial vehicles

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Existing Model Validation/Calibration

- Model output versus field observations

Description	Field Observations	Simulation
Vehicles Processed at Facility (per hour)	575 vehicles (average)	585 vehicles
Maximum queue	CARS ~ 0.6 miles (half way across bridge) TRUCKS ~ 1.3 miles (close to Canadian Plaza)	CARS ~ 0.5 mi TRUCKS ~ 1.3 mi
Average Delay*	26.3 min/vehicle	22.3 min/vehicle Range: 13.4 to 33.8

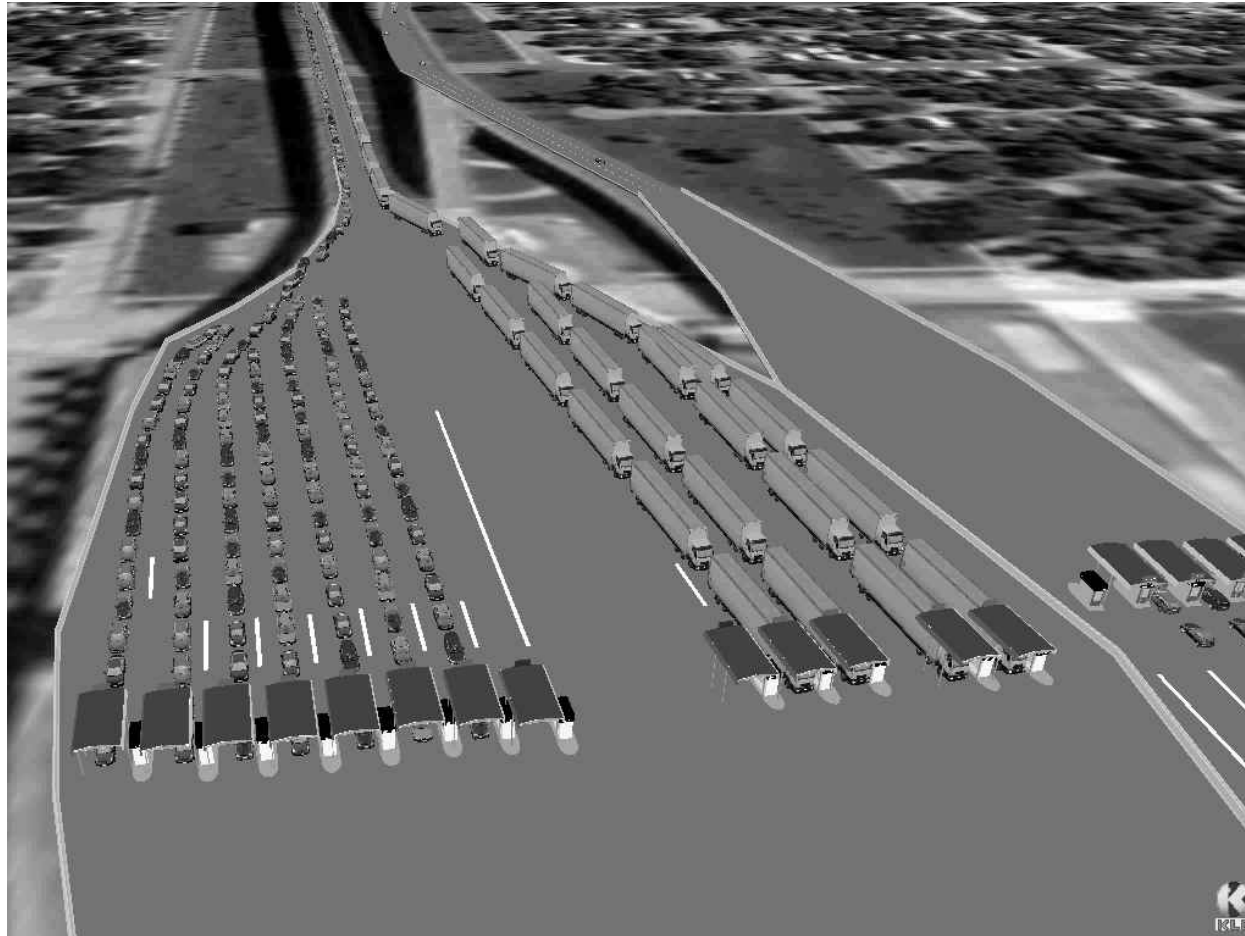
* Weighted average between cars and trucks. Delay measured over a distance of 1.8 miles starting from 0.5 miles upstream of Canadian Plaza up to US Inbound plaza.

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS

Existing PM
Peak



Max.
Queue
Cars:
0.5 miles

Max. Queue
Trucks:
1.3 miles

September 2008

BLUE WATER BRIDGE DELAY ANALYSIS



Future Year Conditions (2030)

- Analyzed two different peak periods
 - Peak passenger traffic in July
 - Peak commercial traffic in October
- Same processing rates as existing model
- Optimal plaza layout based on traffic
- Fully staffed

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Future Year Conditions (2030)

- Forecasted Demand Volumes
 - Passenger Design Hour
 - 944 cars/hour
 - 181 trucks/hour
 - Commercial Design Hour
 - 362 cars/hour
 - 496 trucks/hour
 - 30% of vehicles expected to use FAST/NEXUS
 - Used high growth DHV to assume worst-case scenario for commercial traffic

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Passenger Design Hour, No-Build 2030

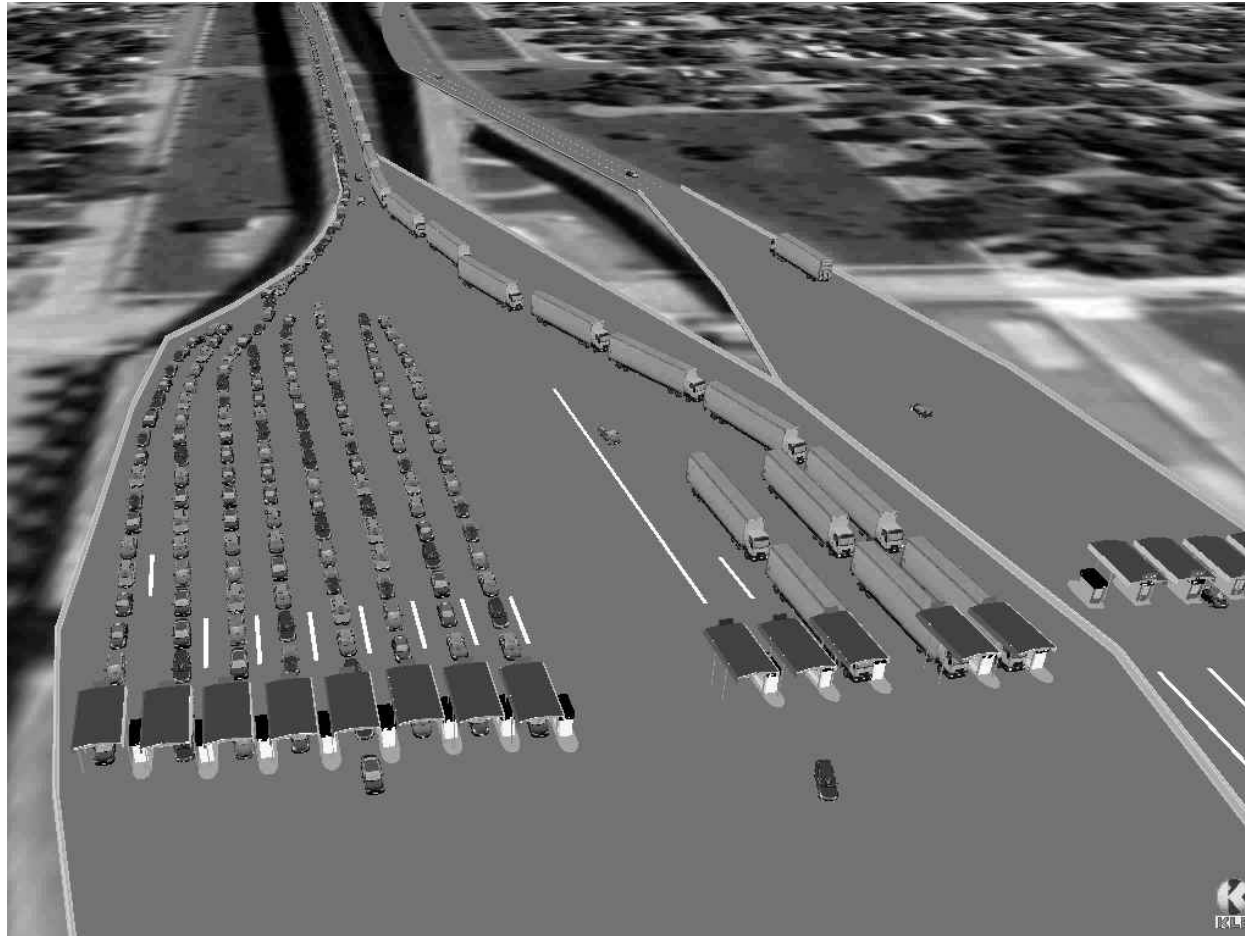
- Inbound Plaza Layout
 - 8 Car lanes
 - 3 Truck lanes
 - 1 FAST
 - 1 NEXUS
- Preliminary Simulation Results
 - Average delay – 31.8 minutes/vehicle
 - Delay range – 20.0 to 43.3 minutes/vehicle
 - Vehicles processed – 814 vehicles/hour
 - Maximum queue: Cars – 1.7 miles
 - Maximum queue: Trucks – 1.5 miles

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS

2030:
No-Build
Passenger
Peak



Max.
Queue
Cars:
1.7 miles

Max. Queue
Trucks:
1.5 miles

September 2008

BLUE WATER BRIDGE DELAY ANALYSIS



Passenger Design Hour, Build 2030

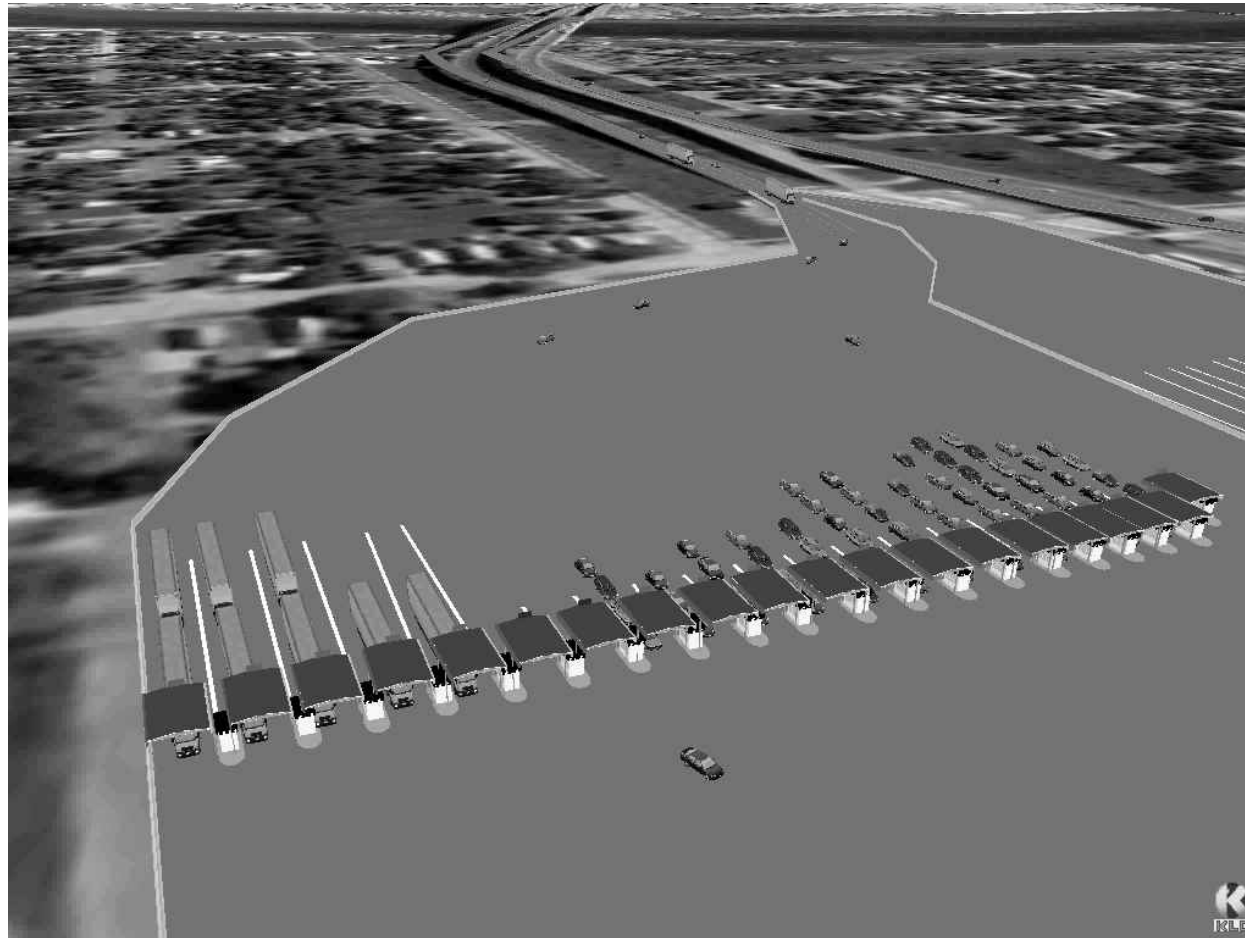
- Suggested Layout
 - 13 Car lanes
 - 5 Truck lanes
 - 1 FAST
 - 1 NEXUS
- Preliminary Simulation Results
 - Average delay – 3.4 minutes/vehicle
 - Delay range – 2.8 to 4.2 minutes/vehicle
 - Vehicles processed – 1110 vehicles/hour
 - Maximum queue: Cars – within plaza
 - Maximum queue: Trucks – within plaza

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS

2030:
Build
Passenger
Peak



Max. Queue
Cars:
Within Plaza

Max. Queue
Trucks:
Within Plaza

September 2008

BLUE WATER BRIDGE DELAY ANALYSIS



Commercial Design Hour, No-Build 2030

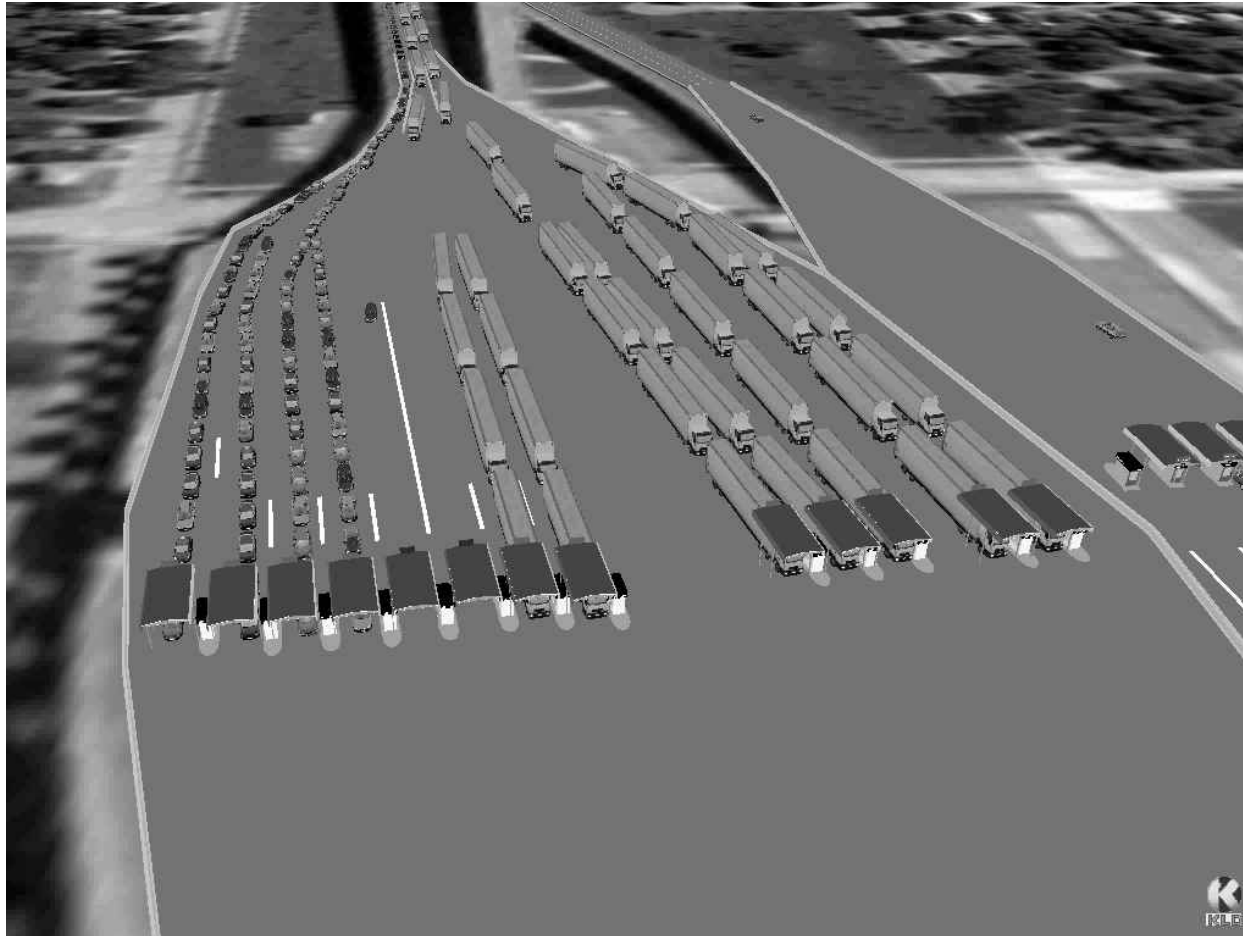
- Suggested Layout
 - 4 Car lanes
 - 7 Truck lanes
 - 1 FAST
 - 1 NEXUS
- Preliminary Simulation Results
 - Average delay – 19.5 minutes/vehicle
 - Delay range – 16.0 to 27.2 minutes/vehicle
 - Vehicles processed – 696 vehicles/hour
 - Maximum queue: Cars – 0.1 miles
 - Maximum queue: Trucks – beyond study area (> 1.8 miles)

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS

2030:
No-Build
Commercial
Peak



Max.
Queue
Cars:
0.1 miles

Max. Queue
Trucks:
Beyond
study area
(>1.8 miles)

September 2008

BLUE WATER BRIDGE DELAY ANALYSIS



Commercial Design Hour, Build 2030

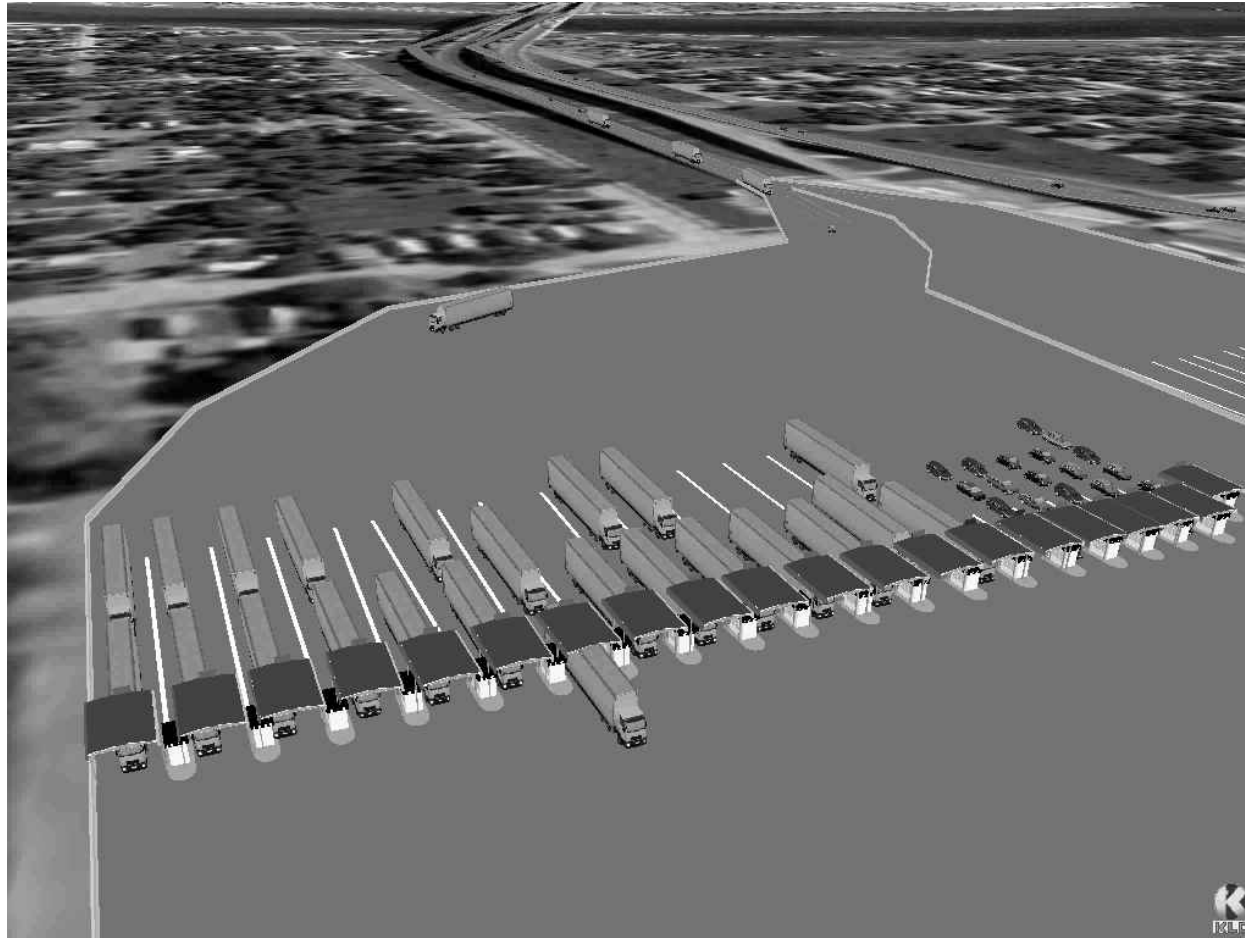
- Suggested Layout
 - 5 Car lanes
 - 13 Truck lanes
 - 1 FAST
 - 1 NEXUS
- Preliminary Simulation Results
 - Average delay – 3.1 minutes/vehicle
 - Delay range – 2.5 to 3.6 minutes/vehicle
 - Vehicles processed – 844 vehicles/hour
 - Maximum queue: Cars – within plaza
 - Maximum queue: Trucks – within plaza

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS

2030:
Build
Commercial
Peak



Max. Queue
Cars:
Within Plaza

Max. Queue
Trucks:
Within Plaza

September 2008

BLUE WATER BRIDGE DELAY ANALYSIS



Model Output	Passenger peak		Commercial Peak	
	Future No-Build	Future Build	Future No-Build	Future Build
Vehicles Processed per hour	814	1110	696	844
Average Delay (min/veh)	31.8	3.4	19.5	3.1
Maximum Queue Cars	1.7 miles	Within plaza	0.1 miles	Within plaza
Maximum Queue Trucks	1.5 miles	Within plaza	Beyond study area (> 1.8 miles)	Within plaza

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Sensitivity Studies on Future Build Conditions

- Base: Fully staffed
 - 18 Staffed lanes
- Case 1: 80% staffed
 - 15 Staffed lanes
- Case 2: 70% staffed
 - 13 Staffed lanes
- All cases include 1 FAST and 1 NEXUS lanes

Note: No-Build includes 11 staffed lanes

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Passenger Peak Preliminary Results

Case	Delay (min/veh)	Maximum Queue Cars	Maximum Queue Trucks	Vehicles Processed per hour
18 Staffed Lanes	3.4	Within plaza	Within plaza	1110
15 Staffed Lanes	9.2	Within plaza	Beyond study area (>1.8 miles)	1036
13 Staffed Lanes	15.5	0.1 miles	Beyond study area (>1.8 miles)	922
No-Build 11 Staffed Lanes	31.8	1.7 miles	1.5 miles	814

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Commercial Peak Preliminary Results

Case	Delay (min/veh)	Maximum Queue Cars	Maximum Queue Trucks	Vehicles Processed per hour
18 Staffed Lanes	3.1	Within plaza	Within plaza	844
15 Staffed Lanes	19.5	1.0 mile	Within plaza	705
13 Staffed Lanes	22.8	1.0 mile	0.5 miles	668
No-Build 11 Staffed Lanes	19.7	0.1 miles	Beyond study area (>1.8 miles)	696

September 2008



BLUE WATER BRIDGE DELAY ANALYSIS



Closing Thoughts

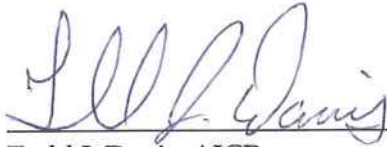
- Models are a tool and show a potential snapshot of future events based on reasonable assumptions and known conditions at that point in time
- The model was run under optimal conditions
- Reduction of queue length is a safety improvement
- Prepare technical memorandum
- Summarize results in FEIS

September 2008



Consultant Disclosure Statement

Wilbur Smith Associates, Inc. (WSA) has no interest, financial or otherwise, in the preparation of the Blue Water Bridge engineering analysis and Final Environmental Impact Statement other than compensation for the services performed and the general enhancement of WSA's professional reputation. The team of professionals, which WSA assembled to conduct field studies and analyses, was selected based solely upon their qualifications. To the best of WSA's knowledge, no person or firm contributing to the preparation of this document has any interest in the findings or outcome of the process.



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